

Recommendations for System built schools

1. This guidance specifically addresses the problem of asbestos fibre release from walls, column cladding and ceiling voids in System built schools. It is not designed to be definitive guidance for the general management of asbestos in schools.
2. This guidance is based on best practice and has been written in consultation with experienced asbestos consultants. It is considered that there are flaws in the HSE CLASP Working Group guidance that could allow release of asbestos fibres, exposure of the operatives, contamination of classrooms, and consequential exposure of the occupants of the schools. Therefore where appropriate the Working Group guidance has been strengthened. It is recommended that the following actions are taken before the school can be considered safe for occupation.
3. It is suggested that the school's Asbestos Management Plan should be amended to take account of the recommendations of this document. It should also include the results of all air sampling, any remedial work carried out and any inspection or survey undertaken. In addition all future inspections carried out to check on the condition of any remediation should be recorded. All the actions, precautions and safe systems of work need to be recorded in the Asbestos Management Plan.

Summary

4. Many System built schools contain large amounts of asbestos in their structure in critical areas to protect structural components from fire and to prevent the spread of fire. Asbestos was also used in areas subject to high humidity such as toilets. Although some of the asbestos material is visible, much of it is hidden in walls, ceiling voids and as column cladding behind metal casings. Over the years some of the asbestos material has deteriorated and released asbestos fibres into the voids, in some schools asbestos debris and off-cuts were left in the ceiling voids or swept into the wall and column voids when the schools were built.
5. In some System built schools significant numbers of asbestos fibres are released into the rooms, the ceiling, wall and column voids when interior walls and cladding on structural columns are hit or disturbed. Those levels can be above the Control Level. Fibres are also released when doors and windows are slammed and window-sills are shaken or a person sits on them. Where window frames have been fastened to column casings a strong wind can release asbestos fibres as the windows flex. Any fitting or fixtures screwed onto the casings are also liable to release asbestos fibres into the rooms or voids. Any disturbance is liable to eject the asbestos fibres through the smallest gap, crack or hole in the walls or columns. The fibres are also ejected out of the open base and top of the column cladding. Any asbestos fibres in the ceiling void will filter down through the smallest of cracks into the room beneath. Asbestos fibres will migrate with similar

properties of a gas, if air can get through a gap then so can the asbestos.

Training and qualifications

6. This guidance specifically advises when it is considered that a specialist licensed asbestos contractor should carry out a task. However there are occasions that a non-specialist can carry out certain tasks that will not involve the disturbance of asbestos materials. School maintenance staff and caretakers should be trained so that they understand the risks from asbestos. They should have a good working knowledge of the school's asbestos management plan, survey and asbestos register and they should be aware of the whereabouts of known and possible locations of asbestos in their school. They should be fully conversant with the available guidance on how to carry out tasks on asbestos materials, and be aware of the simple tasks that they might be able to perform and those that require specialist contractors. They should be trained so that they know which measures they have to take to prevent damaging or disturbing asbestos materials.
7. It should be stressed that the majority of school maintenance staff and caretakers will not have had sufficient training that would allow them to safely enter an asbestos contaminated area or carry out any task that may disturb asbestos fibres. Therefore they should not attempt carrying out any task that may disturb asbestos materials.
8. HSE Asbestos Essentials is a well written guide and it stresses the importance of training and carrying out even the most minor tasks under carefully controlled conditions. EM2 of the guidance gives details of the training requirements. For instance the changing of the bulb in a light fitting attached to an AIB ceiling tile requires the person carrying out the task to be properly trained, as does the simple act of lifting the edge of a contaminated, or AIB, ceiling tile. The person who intends to change the bulb or lift the tile, has to wear a disposable overall (Type 5) with a fitted hood, boots without laces and a disposable particulate respirator (FF P3). The surrounding area should be covered with polythene sheeting, warning notices should be displayed and entry to the room restricted. The outside and inside of the light fitting has to be cleaned in a specific manner that restricts the release of asbestos fibres, and that has to be done before even attempting to remove the bulb. The cleaning should be done with a specialist vacuum that prevents the escape of asbestos fibres (HEPA vacuum) and then further cleaning has to be carried out with wet rags, which should be disposed of as hazardous waste.

It is highly unlikely that a school will have access to such a vacuum or the protective equipment. A normal vacuum will cause more harm than good as it will blow asbestos fibres around the room. Once the bulb has been changed then the person who carried out the task has to decontaminate using specialist procedures. All equipment and surfaces that might have been contaminated have to be thoroughly cleaned and any rags, polythene sheeting, masks and overalls disposed of as hazardous waste.

Therefore if the school's maintenance staff or caretaker do not have the training and equipment, specialist contractors should always carry out the task, however simple it may appear.

See: <http://www.hse.gov.uk/asbestos/essentials/index.htm>

Asbestos survey

9. The Asbestos Register should include details of the type of building, (Eg: CLASP, SCOLA, Hills etc) the Mk, date built and details of specified locations of asbestos and possible locations of asbestos. These details can be determined in a desk top survey. Following the desk top survey a thorough Type 2 asbestos survey should have been carried out in the school by a UKAS accredited surveyor. The surveyor should also be experienced. A newly qualified surveyor might legally be able to carry out the survey but it is unlikely that he or she will have acquired the necessary skills or experience.
10. The survey should take place when the school is not occupied, and bulk sampling of materials should be taken so that the asbestos content can be determined. All the results and material and personal risk assessments should be recorded in the school's asbestos register. Recommendations should be given on how to manage any known or suspected asbestos.
11. An additional visual survey/inspection should be carried out to identify and record the specific problems with System buildings. This survey should identify any columns with loose cladding, gaps in cladding, fitting and fixtures fastened to cladding and any gaps behind the columns or where they enter the ceiling void. It should identify gaps in skirting board around columns and along walls. Any gaps or holes in walls should be identified.
12. The ceiling void should be a sealed space, for if it is not then asbestos fibres can enter the rooms. Any missing, damaged and ill fitting ceiling tiles should be identified. All the ceiling tiles should fit snugly in the ceiling grid with no visible gaps. The join between the tile and the grid should be sealed with paint or sealant, if it is not the fact should be noted. Although HSE guidance allows this survey to be carried out by the school's maintenance staff, it is advisable to use a licensed specialist surveyor.
13. If possible the ceiling void should be inspected. However entry to the void must only be carried out under carefully controlled conditions as detailed in the HSE Asbestos Essentials. If there is possible asbestos contamination in the void all ceiling tiles have to be treated as if they have asbestos contamination on the top surface. It is strongly advised that any procedure that involves disturbing the ceiling tiles, whether they are Asbestos Insulating Board (AIB) or not, is carried out by a specialist licensed contractor or UKAS accredited surveyor. Further advice is given below.
14. All the findings should be entered on the asbestos register.

Air sampling

15. It is likely that the school's asbestos survey will only identify the visible and accessible asbestos materials. Any areas that are difficult to access are

invariably listed as "Assume asbestos present." This assumption might alert any workmen about to undertake work in the area, but it does not identify whether the asbestos is present or whether it is in a damaged condition and releasing asbestos fibres. The hidden materials can be identified by removing the cladding, wall or ceiling tiles and carrying out an inspection, however in most cases this is not advisable as it could potentially release high levels of fibres. HSL advised sending small cameras or endoscopes into the column voids to identify any damage or debris. However that is only practical on a limited scale. In addition such a system still does not address whether normal day-to-day occupation would disturb the asbestos material sufficiently to cause asbestos fibres to be released.

16. Air sampling in the rooms and ceiling void is a practical alternative for if carried out correctly, it will readily identify if asbestos fibres are being released into the rooms and ceiling void. This is a particular problem that was identified with System built schools where hidden damaged asbestos was releasing significant levels of asbestos fibres into the rooms, and conventional type 2 asbestos surveys had failed to identify the problem. The release of asbestos fibres was only identified when air sampling was carried out.
17. It is therefore advised that air monitoring should be carried out to establish airborne asbestos fibre levels in schools. It is important that these tests are carried out with disturbance representative of typical day to day activity in the school. It is inevitable that there will be non-asbestos fibres in the school such as carpet fibres and dust which will be disturbed and may obscure the filters. When this occurs more than one sampler should be used with shorter periods of sampling to reduce the dust loading on the filters, as per the guidance in the HSE Analysts' Guide to Sampling. Where there is a significant proportion of countable fibres in the air samples which appear not to be asbestos, Scanning Electron Microscopy, or Plasma Arc Etching (Ashing) analysis can also be used to distinguish asbestos fibres, and thus the true asbestos concentration can be determined.
18. When there is no disturbance, asbestos fibres will settle on surfaces and will not become airborne. Consequently air sampling conducted with no disturbance of surfaces will inevitably record low fibre levels. They will be significantly lower than when the school is occupied with staff and pupils, consequently the results of test carried out without disturbance when the school is empty cannot be considered as representative.
19. If the school is not occupied "Reassurance" testing without disturbance cannot be used as valid method for assessing fibre levels after an asbestos incident, neither can it be used to justify the area being reopened for normal use. Analysts frequently use Reassurance testing without disturbance following a release of asbestos fibres to give reassurance that the classrooms are safe to reoccupy. Regrettably on too many occasions these are unjustifiable and invalid assurances.
20. If air sampling is carried out while the school is normally occupied then the results are likely to be a true representative measure of airborne fibre levels, so long as care has been taken in the siting of the samplers. However it is usual for air sampling to be carried out when the schools is not occupied and therefore disturbance should take place that simulates

normal activities including vigorous brushing and dusting of surfaces, as would normally happen when the school is cleaned. If more vigorous disturbance testing is intended such as hitting walls and columns, then this should only be carried out under controlled conditions in a sealed enclosure. As high fibre levels can be released it should not be attempted outside an enclosure.

21. Disturbance should replicate the normal activities that take place when the school is occupied by staff and children. The type of disturbance that has been carried out should be recorded on the air test results, along with how it was created and for how long and how often it took place. Only then can the air tests be considered as a valid reassurance that the classrooms are safe to reoccupy.
22. Where necessary environmental cleaning should be carried out by specialist licensed contractors.
23. If raised fibre levels are counted then the source of fibre release should be determined and remedial measures carried out until the counts are reduced to an acceptable level. It has to be stressed that although rooms can be legally occupied at the Clearance Limit it is not an acceptable permanent background level and is unsafe particularly for children. It is only acceptable as a transient level.
24. The results of air sampling should be recorded in the Asbestos Register. They should also be compared with the Risk Assessments in the asbestos survey, and the assessment should be amended depending on the results.

Asbestos fibres released from gaps in column casings and walls

25. Having identified all the gaps, cracks and holes in the column casings they should be sealed initially below the ceiling level. Attention must equally be paid to sealing the backs of the casings where the column is free standing in a room. Particular care should be taken to ensure that a complete seal is obtained, for it can be difficult to access the backs of the casings as they can be only a few millimetres from the adjacent wall or window frame. Where the gap is too great for silicone sealant then expanding foam could be used to fill the gap, however the effectiveness of the seal should be regularly checked as the flexing of any adjacent window frame could unseat the sealant. The frequencies of these re-inspections should be set out in the asbestos management plan, and will depend on the location, vulnerability and type of sealing that has taken place. It is suggested that in critical areas where it is likely that the seal could be broken then the inspections should be weekly, whereas in less critical areas then a monthly inspection should be sufficient.
26. A good quality silicone-based sealant should be used. Where possible uPVC strips can be used over the top of the sealed gaps in the columns gluing them in place with the same sealant. Particular attention should be paid around the base, where the casing interfaces with the floor or skirting. In addition all other edges, cracks, gaps and holes should be similarly sealed, such as where the casing abuts the wall, the window panel or the window frame.

27. In some schools HSE has identified similar problems of fibres being ejected from beneath interior walls when the walls were hit. This is because asbestos debris was swept into the voids when the schools were built, also asbestos materials in the wall voids have deteriorated over the years and have released fibres. In the test cases the walls were plasterboard, and therefore it must be assumed that the problem of asbestos fibre release would be more prevalent with AIB walls. All gaps, cracks and holes in walls must be sealed. Particular attention should be paid to sealing the skirting board to the wall and the skirting board to the floor. It is likely that an effective seal will be difficult to achieve. Sealant will not adequately adhere to floor polish or rough surfaces, therefore the surface should be cleaned and if necessary sanded before applying the sealant - specialist help may be required for this.
28. The CLASP Working Group advise that if the column casings are loose then they should be re-secured by checking the fixings in the ceiling void and behind the skirting. They allow the school's maintenance staff to carry out the inspection and refastening. It is considered that this is bad advice. If the casing is loose it is probable that asbestos fibres will have accumulated at the base of the column and also contamination will be present in the ceiling void. Therefore any such work should only be carried out by a specialist licensed contractor under controlled conditions in a sealed enclosure. Before any inspection or work is considered in the ceiling void the guidance in the next section should be read and followed.
29. An assessment should be made whether any fittings and fixings attached to the casings could by their nature or use, disturb the AIB cladding and release asbestos fibres. Pulling out an electrical plug from its socket for instance could possibly flex the column casing. A door latch fixed onto a column casing will inevitably disturb the AIB when the door is closed. If it is decided to remove the fitting or fixings this should be carried out under carefully controlled conditions, which are laid out for similar tasks in the HSE Asbestos Essentials Task manual.
30. It should be ensured that safe working practice is employed when removing existing screws from the casing. This applies to the removal of electrical sockets, computer terminals, associated ducting and any other fittings and fastenings. The resulting holes should be immediately sealed.
31. The screws, and where contamination is possible the fittings, should be disposed of as hazardous waste. The local authority will give instructions on disposal of such waste. If more than a few fittings are to be removed then this should be carried out by a licensed contractor.
32. Doors and windows should not fasten to any column casing that contains AIB. If doors, windows or a concertina expanding partition are fixed to column casings, then expert advice should be sought on how they can be safely hung and operated in future. Doors should not be removed without expert advice as they will normally act as a fire-break.
33. It was common in System buildings that the window surrounds were AIB. In some schools the window blinds or curtain rails have been fixed to AIB. If they have, the fixings should be removed under controlled conditions and the holes sealed. All window surrounds should be checked whether they are AIB and any fastenings removed under controlled conditions.

34. A good quality silicone sealant should be used. In some cases it is unlikely that the sealant will provide a complete seal for more than a number of months, although where the surfaces are suitable the seal could last for a number of years. Children are curious and therefore strips of sealant could be removed or partially removed by inquisitive fingers. Therefore a programme for routine inspection of all the casings, walls and ceilings including the condition and fidelity of the seals, should be introduced. This should take place at least once a month, or in cases of vulnerable locations at least once a week. If it is decided that weekly inspections are necessary then that would tend to indicate that a more permanent method of sealing is required that is more resistant to damage or disturbance.
35. The HSE CLASP Working Group allow the inspection and sealing to be carried out by the school's maintenance staff. It is however recommended that the inspection and remedial work is carried out by a specialist contractor. Raised fibre levels were counted during the process of sealing the columns therefore if more than a few cracks are to be sealed an unacceptable level of exposure could occur.
36. Where remediation has already taken place this should be inspected to ensure that it has been carried out to a satisfactory standard. If not, any sealant should be removed and replaced under controlled conditions, the sealant should be treated and disposed of as hazardous waste.
37. HSE, HSL, Department of Education, Local Government Employers and Scape guidance all advised that once the remediation work had been finished air sampling should be carried out to confirm the success or otherwise of the work. Indeed in some cases it was only air sampling that proved asbestos fibres were still being released following remediation. Despite this the HSE CLASP Working Group guidance no longer includes this advice, and instead permits a visual inspection to ensure that the sealing is effective. A visual inspection is certainly required and ideally by someone other than the person who carried out the work. However in addition it is strongly recommended that that air sampling is carried out otherwise it is impossible to say whether fibres are still being released. These tests should be carried out with disturbance under controlled conditions to ensure that the seals will act as an effective barrier when the room is normally occupied.
38. A system of management should be implemented and recorded in the Asbestos Management Plan to:
- Prevent any more holes being drilled in any of the column casings.
 - Make a record in the asbestos management plan of the frequency of inspections that will have to be carried out to check that the seals remain intact. Each inspection should be recorded in the asbestos management plan.
 - Carry out a risk assessment of any future activity or work which involve disturbance or impact upon the casing and assess the potential for disturbance of ACMs and fibre release.

- The Asbestos Management Plan should be amended to take account of any findings.

Release of asbestos fibres into ceiling void

39. The following applies whether the ceiling tiles are AIB or not.

The void

40. Any asbestos fibres in the ceiling void can readily enter the rooms. It is therefore necessary to eliminate the source of contamination by removing any accessible AIB off-cuts, debris and dust, sealing the column casings and open wall voids and environmentally cleaning the ceiling void. Regardless how thorough the sealing and cleaning might be any asbestos fibres in the void can readily enter the rooms through the smallest crack or gap, just as easily as air can. Therefore once work has finished in the void the ceiling tiles should fit precisely in the ceiling grid and any cracks or gaps should be sealed from beneath with a suitable paint or sealant. As recommended by HSE and Scape.
41. Contamination of the ceiling void can occur when the columns are disturbed by being kicked, hit or squeezed. Asbestos fibres are ejected from the gaps in the side and base of the casings and also the tops into the ceiling void. Contamination can also occur if the column casings from the upper floors contain AIB and extend downwards into the ceiling void beneath.
42. HSE also identified that the same process can occur when a wall is knocked or hit, asbestos fibres can be ejected out of the top of the wall void into the ceiling void. A further source of contamination has been identified in some schools where asbestos debris and AIB off cuts were left in the voids when the schools were built. In addition some schools contain asbestos firebreaks or pipe lagging in the ceiling void.
43. If an inspection of the ceiling void has not taken place during the asbestos survey, the survey will probably "assume" the presence of asbestos materials in the void. As the condition of the void or the presence of contamination has not been assessed, it has to be assumed that asbestos materials, debris and fibres are present and that the ceiling void is contaminated.
44. The ceiling voids should therefore be considered to be asbestos-contaminated throughout, and controlled safe working procedures should take place with controlled access only. Any person accessing the areas should have a risk assessment carried out before the activity takes place, they should be authorised, properly trained and wear the correct specialist disposal overalls and specialist masks [Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE)].
45. In a school this will normally entail any inspection or work being undertaken by specialist licensed contractors, although it is within the law for a non-specialist to inspect and carry out limited work on asbestos materials. Contamination of the rooms is likely unless

rigorous controls are in place, it is also probable that the person carrying out the task will become contaminated. It is therefore strongly advised that any removal of ceiling tiles, or any inspection or work in the ceiling void is carried out by a specialist licensed contractor.

46. The point of access needs to be segregated in the form of an airlock to contain any possible debris or asbestos fibres which may be released when the ceiling tile is lifted, dropped or slid to one side. If emergency access has to be made without preparation of the airlock, the area below the point of access should be isolated, sealed and all other personnel excluded. This should then be subject to an environmental clean and reassurance air monitoring.
47. Despite the rigorous controls that are necessary, and recommended by HSE, to even look inside the ceiling void, the CLASP Working Group guidance allows a visual inspection of the void by the school's maintenance staff to determine if there is any asbestos contamination. This is not considered to be good advice, for as has been seen this paper recommends that the inspection is carried out by specialist contractors. For if the lifting of one tile can cause contamination then the chances are greatly increased when many tiles are lifted during the inspection of the whole area of the void.
48. The Working Group guidance is also flawed because a visual survey will only be able to identify obvious AIB off-cuts or bits of debris lying around in the void. A visual inspection by non specialist maintenance staff is not going to identify asbestos dust and fine fibres that may be lying on girders, struts, cables, pipes, lagging and any other surfaces. Only specialist air and dust sampling will achieve that.
49. Any work on or around asbestos materials must be carried out as safely as possible. These safe working practices should be based on the findings of a desk-top survey, the asbestos survey and the results of the air sampling, they should be recorded in the asbestos register. This has particular significance when work is carried out in the ceiling void where asbestos contamination is probable, and even the lifting of a ceiling tile can allow asbestos contamination of the room beneath.
50. It is highly unlikely that the school's maintenance staff would wear a personal air sampler, whereas a specialist contractor will. The maintenance staff will therefore have no idea if asbestos fibres are present or whether the control limits are likely to be exceeded. The sampler measures the exposure of the operator, therefore the time spent in the void should be recorded bearing in mind the control limit of 0.1 f/ml of airborne fibres averaged over a 4-hour period. If this control limit is likely to be exceeded, then the exemptions to the Control of Asbestos Regulations 2006 in Regulation 3(2) no longer apply. By law the proposed work would then have to be performed by a licensed contractor.
51. If significant asbestos fibre levels are present in the void then the area will have to be environmentally cleaned by a licensed asbestos contractor prior to the work.

52. Licensed asbestos contractors should be used to inspect and seal the tops of the column casings with expanding polyurethane foam or a similar material. The tops and base of columns on the first floor that extend into the ceiling voids must be similarly sealed if they contain AIB. The foam should comply with the appropriate fire certification.
53. HSE identified that asbestos fibres can also be released from the tops of the wall voids when they are open to the ceiling void, and recommended that these are also sealed with expanded foam. Unless there is definitive proof that the voids do not contain deteriorating asbestos materials, AIB off cuts, asbestos debris or fibres, then these should also be sealed.
54. Any benefits from sealing the tops of the casing and walls in the ceiling void are probably negated by the amount of disturbance in the short term caused by removing the tiles to enable sufficient access to seal the casing tops and wall void. Unless the ceiling void is environmentally cleaned immediately after the sealing has been carried out, then the ceiling void will remain contaminated.
55. If on inspection it is found that there are only a few bulkheads to divide the ceiling voids into manageable smaller areas, it might not be practicable to clean the whole void in one operation. If that is the case an option would be to divide the area with polythene sheeting and then environmentally clean each area.
56. Once work has been completed in the ceiling void, the void should be systematically sealed. If no work is planned, or it is unlikely to take place in the immediate future, then the following action should be undertaken as soon as possible:

The ceiling tiles

57. If there are damaged, ill-fitting or missing ceiling tiles then any hole or gap will permit asbestos fibres to enter the rooms. It must therefore be assumed that the rooms have additionally been contaminated from this source.
58. The integrity of the ceiling void must be secured. The following are recommended actions:
 - If disturbance of ceiling tiles or entry into the ceiling void is necessary then proceed as above.
 - Replace missing or badly damaged ceiling tiles. Repair minor damage. Treat all tiles as contaminated with asbestos fibres. Repair or replace AIB tiles with minor damage as per the HSE Asbestos Essentials..
 - Any disturbance of the walls, columns and ceiling void must be carried out under controlled conditions, as above.
 - For all other work from within the rooms:
 - The guidance in HSE Asbestos Essentials should be followed.

- Ensure that all tiles fit precisely in the ceiling grid.
- Seal the gap between the column casing and the adjacent ceiling tile. It is possible that AIB tiles have been used along the edge of the ceiling where it joins the walls and windows. This is possible even when most of the ceiling tiles in a room are not AIB. This should be borne in mind when carrying out any work and any sealing or painting should be carried out in accordance with HSE Asbestos Essentials.
- Seal all gaps by either painting with suitable paint or by applying suitable sealant to all the edges of the ceiling tiles where they rest in the grid.
- If the tiles are nailed or screwed to a concealed grid the integrity of the void is more likely. However it must be assured that the joins are painted or sealed, that no screws are missing and that no cracks or gaps are visible. If tiles are screwed or nailed to the grid it is likely that they are AIB. In which case the painting and sealing should be carried out in accordance to HSE Asbestos Essentials.
- As has been seen ceiling tiles should only be lifted or disturbed under controlled conditions. On no account should children's work or decorations be hung from tiles or the ceiling grid.
- Routine air monitoring should take place once the work is finished with disturbance that simulates normal occupancy and activity.

Fire integrity

59. Asbestos was used in buildings to protect critical parts of the structure from fire damage and to prevent the spread of fire. If previous asbestos remedial works have removed ceiling tiles and replaced them with unsuitable materials then the fire integrity of the school is likely to have been breached. It is also breached if there are missing ceiling tiles or damaged or ill fitting tiles. In one school where tests were undertaken wooden joists and floorboards were unprotected where AIB ceiling tiles had been removed and not replaced. If walls have had holes drilled in them to allow cables and pipes to pass through, then all of these have probably breached the fire integrity of the building, all of these will allow the spread of fire. All ceiling tiles should be replaced with materials of a suitable fire resistance, all damaged tiles should be repaired or replaced. All ill fitting tiles should be refitted so that they sit precisely in the ceiling grid and the join should then be sealed with suitable paint or suitable sealant. Where asbestos materials are removed they must be replaced with materials of a similar or improved fire resistance.

Asbestos exposure is cumulative; therefore rigorous measures should be implemented to avoid future exposures

60. It is known that asbestos fibres are released in some System built schools when the walls and column casing are hit, when the window sills are disturbed and when doors and windows are slammed. It is probable that in a number of schools the occupants have been exposed to unacceptable levels of airborne asbestos fibres over a prolonged period. As

mesothelioma can be caused by low level cumulative exposures to asbestos fibres, rigorous measures must be taken to eliminate the future exposures of the occupants of the school.

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