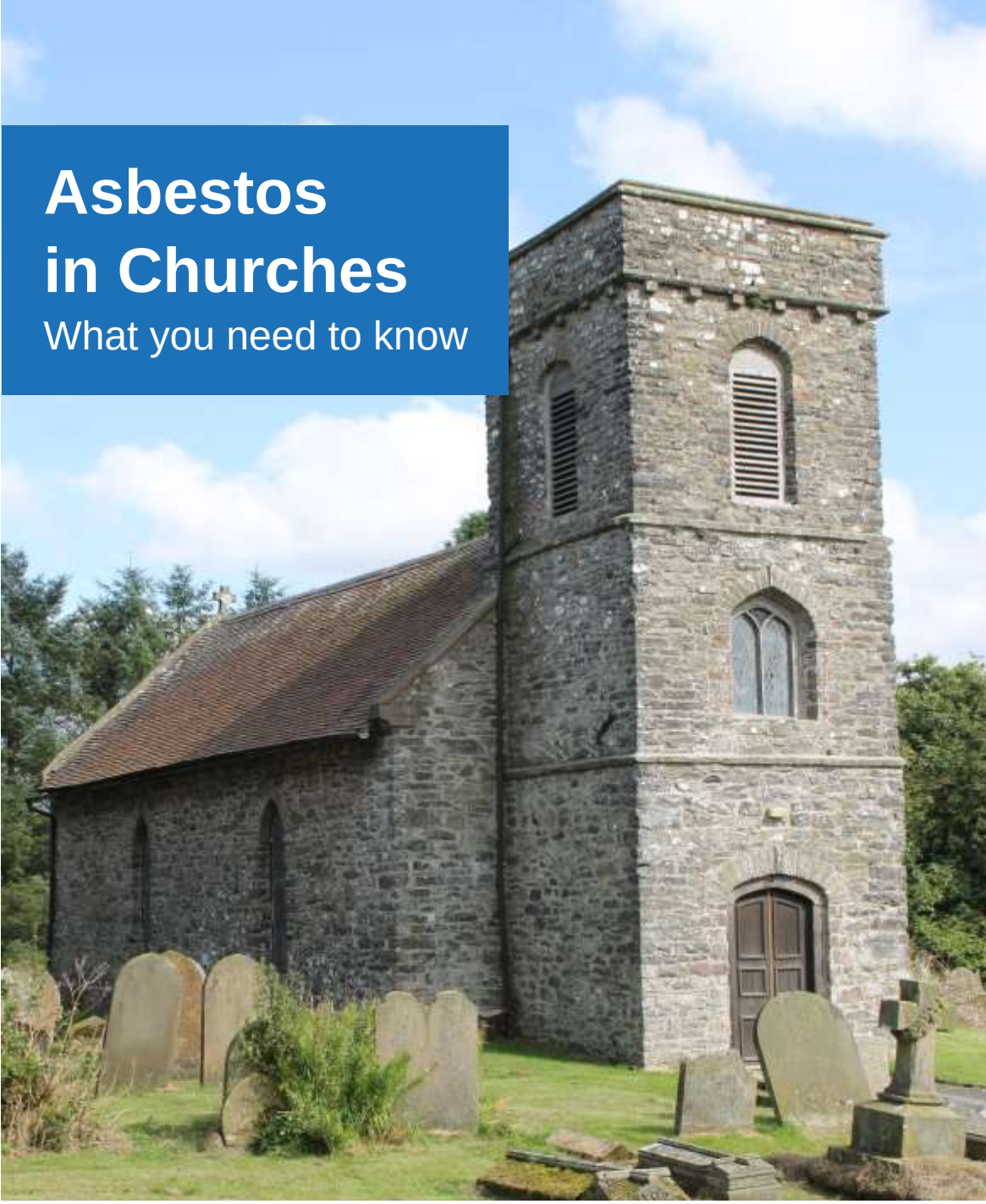
Asbestos in Churches

What you need to know



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PROPERTY TEAM
THE CHURCH OF ENGLAND BIRMINGHAM

One place asbestos-containing materials can often be found in churches is in the Plant Room. This particularly bad example is underneath a church in the north-west of England. Note the pipe lagging (which almost certainly contains asbestos) and its damaged state.

First published in 2013 as "A Making It Easier Guide to Asbestos in Churches". Updated 2018. This edition updated November 2019. All photographs by Ian Simpson unless stated otherwise.

Cover Photograph: All Saints Church, Shelve (Hereford Diocese).

Rear Cover Photographs: St. Athanasius' Church, Kirkdale (Liverpool Diocese) where the National Churches Trust's video on asbestos in churches was filmed in 2018.

Introduction

As a Churchwarden one of your key duties is to make sure that everyone who carries out work in your Church – whether or not they are paid for it – does so safely. This guide is part of a series which aims to make it easier for you to do this.

Asbestos is a natural material which was mined, refined and used in various forms to provide insulation and fire resistance in buildings. It was used in construction from the mid-19th Century until its use in new buildings was phased out from the 1970s and banned in 1999. As a result, many churches which were built or modified between 1850 and 1999 contain asbestos. This booklet:

- explains what asbestos is, how it was used and where it might be found;
- tells you about your responsibilities under the Control of Asbestos Regulations 2012.
- corrects some of the myths surrounding asbestos;

This guide is not a definitive statement of the law but is intended to give you good general guidance. We will notify you of any significant changes to the law or regulations on the website and via our diocesan email bulletin.

If you are unsure have any questions or need further advice then please do not hesitate to contact the author:

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Top Tips

Do

- Ensure that your church has had an asbestos survey in the last five years – if it hasn't, organise one NOW.
- Only employ UKAS-accredited surveyors to carry out an asbestos survey in your church.
- Keep the survey in a safe place – it is an important document!
- Make sure everyone working in your church knows where any asbestos (or suspected asbestos) is, and what precautions they must take around it.
- Treat any material which you think *might* contain asbestos as though you know for certain that it does.

Do not

- Worry! The vast majority of asbestos in buildings is safe and presents no hazard to health.
- Attempt to remove asbestos yourself.
- Continue working if you discover suspected asbestos whilst carrying out a job.
- Proceed with work to remove or remediate asbestos without first obtaining a Faculty.
- Let anyone carry out work on asbestos unless you have verified that they hold the appropriate License to do so.

Asbestos

What is Asbestos and why do I need to know about it?

"Asbestos" is the common name for a family of fibrous silicate minerals which occur naturally in the earth's crust. The family has at least six members, but the three most common forms are chrysotile ("white asbestos"), amosite ("brown asbestos") and crocidolite ("blue asbestos"). The semi-precious stone "tiger's eye" is closely related to asbestos but completely safe.

In ancient times, asbestos was considered a "miraculous" material for its fire-resistant properties. The Roman writer Pliny noted however that slaves who worked with it often became ill.

More recently, asbestos was mined commercially, refined and incorporated into a wide range of products for industrial use (primarily for insulation) and for use in the construction industry (for insulation, fire protection and as a binding agent). Much use was made of asbestos from 1850 onwards and its use peaked in the inter-war years of the 20th Century.

From about 1970 onwards a clear link was established showing that those who worked in the asbestos industry were at a much higher risk of developing incurable lung disease; in 1999 its use in new buildings was banned in the UK.

Many buildings built or modified between 1850 and 1999 contain asbestos. It may be present in insulators, such as boiler pads or asbestos insulation board. Asbestos cement sheeting was a common roofing material, particularly for boiler houses and outbuildings. Some textured surface coatings, notably Artex™, contain asbestos as do some mid-20th Century floor and ceiling tiles. Plastics used in electrical installations prior to about 1955 often contain small amounts of asbestos which was added to increase the insulation as well as to prevent fire.

It is usually unclear to the naked eye whether or not a material contains asbestos.

It is important to understand that the vast majority of asbestos-containing materials (ACMs) in buildings present no immediate health risks whatsoever. The asbestos fibres are bound tightly by the plaster, cement or plastic in which they are contained, and as long as they stay there they cannot cause any harm.

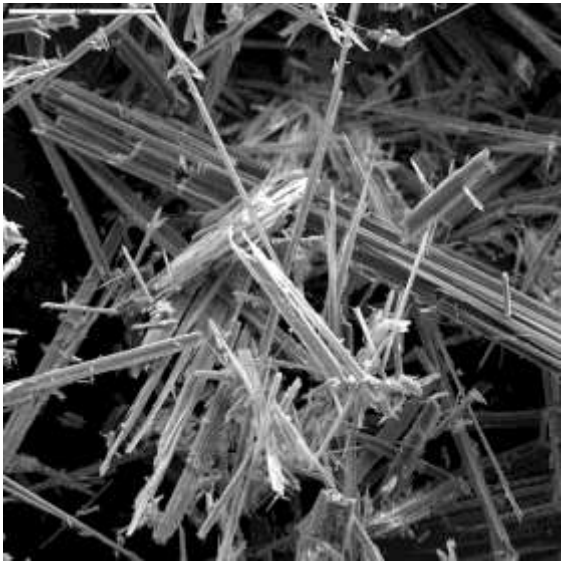

Photo: anthophyllite, a rare form of asbestos, viewed through an electron microscope. (US Geographical Survey, Public Domain)

When ACMs are damaged, broken, drilled or otherwise disturbed, tiny fibres of asbestos escape into the atmosphere. Invisible to the naked eye, under an electron microscope the needle-like shape of the fibres is clear. These tiny needles, when breathed in, lodge in lung tissue and can cause tremendous damage over time.

Asbestos fibres are particularly dangerous to people whose lungs are already damaged through smoking.

Tradespeople working in buildings where ACMs are present are particularly vulnerable to exposure to asbestos fibres and the Control of Asbestos Regulations impose a duty on all those responsible for public buildings – **including churches** – to protect them by recording and marking the location of any ACMs within the building.

These Regulations, updated in 2012, are also intended to protect members of the public, building users and the environment from the effects of asbestos.

Managing Asbestos – Your Responsibilities

It is far more simple than you might think to comply with the law on asbestos in non-domestic buildings.

The first thing you must do is find out whether your building contains asbestos. If it does you need to make a record of where it is, how much of it there is and what condition it is in.

The best way of doing this is to have the building professionally surveyed by a trained, UKAS-accredited asbestos surveyor. Depending on the size of your building this Management Survey should cost between £400 and £1,000. Small

samples of any suspected ACMs will be taken away for laboratory examination to confirm the presence or otherwise of asbestos. If there is a suspected ACM which cannot be sampled then the law requires that it is presumed to contain asbestos.

The Management Survey Report will include an Asbestos Register detailing the samples taken and the location, quantity and condition of any ACMs found. It will look something like the example (from which details identifying church and surveyor have been removed) below.

Report ref: [redacted]

4.0 SURVEY RESULTS

Site: St [redacted], Liverpool — Date of survey: 30 April 2009

4.1 Asbestos Register

Location (refer to plan)	Material description	Sample Numbers	Asbestos Type[1]	Quantity[1]	Accessibility[2]	Condition	Risk Assessment Scores[3,4] M	D	ST	AT	Total	Summary Recommendations	Re-inspection Frequency[5]
G.14 Store (Former Vestry)	No visible suspect asbestos containing materials	-	-	-	-	-	-	-	-	-	-	-	-
G.15 Bungalow Hall	No visible suspect asbestos containing materials	-	-	-	-	-	-	-	-	-	-	-	-
G.16 Bungalow Bedroom	Vinyl floor tiles	9/4/B/30/KS9	Chrysotile	<20m²	High	Fair	1	1	0	1	3	Manage / Remove	12 months
G.17 Bungalow WC	Toilet cistern	9/4/B/30/KS10	Amosite Chrysotile	1 No	High	Fair	1	1	0	2	4	Manage / Remove	12 months
G.18 Bungalow Kitchen	Bitumen pad below sink	9/4/B/30/KS11	Chrysotile	1 No	High	Fair	1	1	0	1	3	Manage / Remove	12 months
G.19 Bungalow Lounge	Vinyl floor tiles (as G.16 Bungalow Bedroom)	Refer to Sample 9/4/B/30/KS9	Chrysotile (strongly presume)	<20m²	High	Fair	1	1	0	1	3	Manage / Remove	12 months

Notes:-
1) Quantity is expressed as area (m²), volume (m³), length (m) or number of items as appropriate. All quantities given are approximate.
2) Risk category is as defined in Section 5 of this report, and is based on the risk material risk assessment algorithm detailed in MDHS39/4.
3) Re-inspection frequency is the suggested maximum period at which asbestos-containing materials are re-inspected by a suitably competent person.
4) Refer to bulk sample analysis record.
5) Abbreviations – **M** = Product Type, **D** = Damage, **ST** = Surface Treatment, **AT** = Asbestos Type
6) **Low** – difficult to reach, **Medium** – some effort required to reach (ladder etc), **High** – within easy reach

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The law requires you, once you have identified the ACMs, to assess the risk that these materials present in terms of exposing building users to airborne fibres and to prepare a written plan explaining how these risks are to be managed.

A reputable surveyor will do this as part of his report, as again may be seen in the example. A standard risk assessment calculation has been carried out based on the type, condition and accessibility of the ACMs (in this case, they are of low risk), and then a summary recommendation is given for the management of the risk – a more detailed proposal for risk management appears later in the report from which the example was taken.

Note: if any part of the building is to be demolished or refurbished you need to specify a "Demolition and Refurbishment" survey when appointing the surveyor.

Once you have the survey report, risk assessment and plan in place, there are three further responsibilities you must discharge:

1. You must arrange to put the plan into action. Depending on what is suggested by your asbestos surveyor this might be as simple as affixing warning labels (left) and arranging for access to the affected area to be restricted, or it may mean a substantial removal and remediation programme (see below).

2. You must monitor and review both the plan and any actions taken to implement it. The survey will tell you the condition of any ACMs as at the survey date, but over time the material could deteriorate and become "friable" which means it could shed fibres into the atmosphere. Your surveyor will propose an appropriate re-inspection interval, often annually and certainly no less often than five-yearly.

3. You must inform people working in church about the asbestos. Before any repair or maintenance work is carried out, you must inform anybody likely to damage or disturb the ACMs of their location and condition. Giving them a copy of the Asbestos Register fulfils this requirement in part but it is good practice to "walk them through" the affected areas and to get them to sign to confirm they understand the precautions they must take.

Note: reputable tradespeople from quality firms will have received training from their employers about the dangers of asbestos and the precautions they should take to avoid exposure. In particular they will know and follow this Golden Rule: **if, whilst carrying out work, you discover a material that you believe contains asbestos, STOP WORK IMMEDIATELY, vacate the area and report it**.

Asbestos Remediation and Removal

This is NOT a task for a church working party! Only Licensed Contractors may carry out work on higher risk ACMs. For some lower-risk materials competent but unlicensed contractors[1] may be used. Your surveyor will advise you.

Remediation of asbestos generally refers to a process of sealing and / or encapsulation to prevent the ACM from shedding fibres now or in the future.

Removal of higher-risk ACMs is a complicated and disruptive procedure which may need to take place inside a sealed, pressurised enclosure in order to prevent fibres from escaping into the atmosphere.

If any remediation or removal work is required at your church, please remember the following points:

1. You will need a Faculty, so contact the Diocesan Advisory Committee straight away. Include in your Petition any "making good" of areas where, for instance, asbestos ceiling boards are being removed as the replacement material and finish will need to be approved.

2. Get a range of quotations! Asbestos work, in the author's experience, is never "cheap" but quotations can vary considerably between contractors for the same work.

3. Some high-risk work must be notified to the HSE two weeks in advance. Your contractor will do this, but you need to be aware of the delay when planning the work.

4. Always ask to see the contractor's license! If you don't see the license, don't let them on site.

[1] This is a change from the 2006 Regulations under which ALL asbestos work had to be carried out by a Licensed Contractor. For details on Licensing, see http://www.hse.gov.uk/asbestos/licensing/licensed-contractor.htm

Common Myths and Misconceptions

Myth: Breathing in even one particle of asbestos means I'll die a horrible death.

Truth: Asbestos is a natural mineral which forms part of the earth's crust. Even if there were no asbestos in the built environment, the natural processes of erosion and weathering mean the chances are that every one of us has breathed in minute quantities of asbestos fibre, with no ill-effects whatsoever.

Prolonged exposure to high concentrations of airborne asbestos particles does, however, significantly increase the risk of contracting certain diseases of the lungs, particularly in smokers. It is to prevent this sort of exposure that the rules governing the management of asbestos in buildings were introduced.

Myth: White asbestos is OK – it's only blue asbestos that we need to worry about.

Truth: There are three main types of asbestos, commonly known as white, brown and blue asbestos. Their official names are chrysotile, amosite and crocidolite. White asbestos (chrysotile) has a different crystal structure from the other two types, meaning it doesn't shed fibres quite so readily. However once those fibres are airborne, they present exactly the same risks to health. ALL forms of asbestos are covered by the Regulations and need to be managed in the manner prescribed.

Myth: We've got asbestos in the building – that means we must have it removed at huge expense.

Truth: Not necessarily. Provided that the asbestos-containing material (ACM) is undamaged and stable – in other words it is not shedding fibres or likely to be damaged so that it starts to shed fibres – then it may be left in place subject to ongoing monitoring of its condition.

It will need to be identified, marked and possibly sealed to prevent it being drilled, broken or removed. Your asbestos surveyor will provide you with an asbestos register which will clearly show the location of any ACM within your building and the measures proposed for managing it.

Myth: Our church wasn't built until 2003 – that means there can't possibly be any asbestos in it!

Truth: You can't just assume this to be the case. No asbestos should have been used in the construction of a post-1999 building but if it incorporates part of an earlier building, or items which pre-date the building (e.g. from an earlier church) then, to be on the safe side, anything which could potentially contain asbestos should be checked.

Myth: There is no need to use a UKAS-accredited asbestos surveyor, they charge more for the same job!

Truth: Anyone at all, even someone with no training or qualifications, can set themselves up as an "asbestos surveyor" but only UKAS-accredited surveyors are accountable for the standard of their work. Obviously there are costs involved in maintaining the standards of training, equipment calibration and the like which come with accreditation but it is not fair to say they do the same job.

A non-accredited surveyor "missed" no less than 116m² of asbestos insulation board in one Liverpool church; unfortunately it was then discovered by an electrician who was cutting out a cable run during the 2012-3 rewiring. It cost the church over £7,000 to make safe, not to mention a six-week delay to the job.

For More Information…

The Health & Safety Executive's Asbestos pages start at **http://www.hse.gov.uk/asbestos/index.htm**

The National Churches Trust's free MaintenanceBooker resource has information about asbestos - see the video "Tackling Asbestos in Kirkdale" at **https://maintenancebooker.org.uk/support/resources/video-and-photographs.**


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