

## Table of Contents

- Chapter 1: Overview and Objectives
- Chapter 2: Setting Expectations
- Chapter 3: Older Systems
- Chapter 4: Energy Efficiency
- Chapter 5: Environmental Issues
- Chapter 6: A Home with Character
- Chapter 7: CEP Quiz
- Chapter 8: Presentation Feedback

### OLDER HOMES

#### Pillar To Post Continuing Education Program





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## CHAPTER 1

### Overview and Objectives

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2

2015/04/25



## Overview and Objectives

This course looks at some of the characteristics of older homes, from squeaky floors to lead water mains. Buyers that are not accustomed to older homes may not have realistic expectations; hence preparation of your buyer is important in these situations. This workbook is designed to help you to help your client know what to expect when buying an older home.

### This course will teach you:

- What the typical life cycles are for some common components
- What the characteristic conditions are for an older home
- What to expect from old systems
- How energy efficiency affects older homes
- What environmental factors should be taken into consideration
- No home is perfect

### By the end of this session you should be able to:

- describe a 'normal maintenance pattern' for an older home.
- describe the 1% rule.
- define 'deferred maintenance'.
- understand the hurdles involved with a home with knob and tube wiring.
- understand the hurdles involved with a home with 60 amp electrical service and the implications for your buyer.
- understand the 'efficiency vs. cost to replace' dilemma for an old octopus furnace and an old cast iron boiler.
- understand the implications of galvanized steel plumbing in an old home.

3

2015/04/25



- understand your clients concern about a lead water main in an old home.
- understand the difference between conductive heat loss and convective heat loss and how this relates to increasing the energy efficiency of an old home.
- understand why insurance companies are afraid of old oil tanks.
- understand the concerns with asbestos and lead based paint
- understand what causes bulging and cracking plaster in an old home.
- understand the implications of a worn hardwood floor surface and know the difference between a cosmetic problem and a significant repair.
- understand what causes floor squeaks.

**This knowledge will:**

- help you prepare buyers for older homes
- help you serve your clients better
- help you answer your client's questions
- show your clients that you are a knowledgeable professional

# Chapter 2

## CHAPTER 2

### Setting Expectations

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## Chapter 2

### Setting Expectations

It has been said that there are generally two groups of buyers interested in purchasing an older home – buyers who have already purchased and/or lived in an older home and hence know what to expect, and regular buyers who have found the ‘perfect’, character home, in the perfect neighborhood, with the perfect quaint and charming touches.

If your buyer is of the first variety (has lived in an old home before) they’re typically fairly prepared to digest problems that can occur in older homes. Unfortunately your second group of buyers can be in for a rude awakening – unless of course you work to help them set realistic expectations from the beginning.

The reality is:

- Older homes may have older systems and components
- Some things may have been upgraded others may not



*Buyers simply cannot expect perfection nor can they expect every system in an older home to be new or upgraded. In this sense, there is no reason for the seller to upgrade everything, just so they can sell the home. Buyers should expect to see some aging systems and some evidence of weathering and should be prepared to maintain the home and upgrade and replace*

*systems as required.*

### Normal Maintenance Cycles

Everything eventually wears out – this is a fact of life. What does differ is the rate at which components in the home wear out. For example:

- Conventional furnace lasts 20 to 25 years
- Galvanized steel plumbing lasts about 40 years
- Asphalt shingle roof surface lasts 15 to 20 years

A house that has been cared for settles into a ‘normal maintenance pattern’ after a number of years. Normal maintenance costs about 1% of the value of the home per year so for a \$250,000 home, that’s \$2,500 per year.

Here are some case studies to illustrate the figures:

#### Case Study 1 - Client A

Client A buys a home and replaces the furnace in year one (\$3,000) and resurfaces the roof in year four (\$6,000). Is this unreasonable? That’s \$9,000 in four years or \$2,250 per year

The 1% rule works out quite well on ‘established homes’ and is a good starting point for your client to understand ‘normal maintenance’ and for budgeting for repairs.

#### Case Study 2 - Client B

Client B buys a small house that is very expensive because of the area. In this example Client B purchases the same house as Client A but does so in the most expensive area of town. Client B pays 50% or 100% more than Client A for the same house in the more expensive area.

The question is then - Does the 1% rule still apply? The answer is yes because typically more expensive areas, with higher end homes, have more expensive systems – the roof surface may be slate instead of asphalt shingles for example. In addition, the fact is - like it or not – repairs simply cost more in an expensive area of town!

- Don't forget the unforeseen repairs, the tub surround that goes soft because someone didn't resal the grout several times a year, or the damage from accumulated humidity in the house without the fan in the bathroom, or in the kitchen, or just not using them properly.

## Deferred Maintenance

Deferred maintenance is a practice of allowing components in the home to deteriorate by postponing prudent but non-essential repairs to save costs. The failure to perform needed repair and normal maintenance creates deferred maintenance which will result in higher costs (or failure of that component) than if normal maintenance had occurred.

Imagine a home that needs a new roof surface, a new furnace and the electrical system is completely obsolete. We call this deferred maintenance. In this case it's going to cost much more than 1% per year for the first few years until you catch up.

There are some mitigating factors to consider however since:

- Most home owners replace or repair systems when they no longer function so that they can comfortably live in their home
- It is not uncommon for an old system to be completely functional.

In this sense older homes do not necessarily equal fixer-uppers. Your client's home inspection will be the most important tool in understanding the particulars of the older home he/she wants to purchase. Each home will be different. Some older homes will be better than new!

On the other hand, it is also possible that many systems within the older home are near the end of their typical life cycle, coincidentally, at the same time. You may call this deferred maintenance or you may call it 'bad luck' for the buyer. Either way, it's not always neglect on the seller's part.



**Your Client May Ask:** How much fixing and replacing should I expect within this home?

**Your Possible Answer:** No house is perfect. Older homes may have older systems and components. Some things may have been upgraded others may not. You should be prepared to maintain, upgrade and replace older systems. Let's not jump to any conclusions — let's wait for your home

8

2015/04/25



*inspection report as this will give us some solid foundations in understanding the state of the home as it is now.*



**Your Client May Ask:** How much should I expect to spend each year to maintain this home?

**Your Possible Answer:** Normal maintenance costs average about 1% of the value of the home per year so for a \$250,000 home, that's \$2,500 per year. If the home requires that you replace any major systems over the next few years this can of course increase in those years.

## How to Talk to Your Clients about Costs

Whether the home has not been well-maintained or considerable deferred maintenance has taken place over the years, you will often be faced with questions about the cost to fix or replace components in the older home.

While the next chapters in this workbook will focus on typical system failures particular to older homes so that you can understand when and how they occur, you should also be thinking about how to answer questions about costs.



**If your client asks you about the cost to replace any of the systems discussed within this workbook, you should refer them to the Pillar To Post Cost Guide brochure or the Pillar To Post website [www.pillartopost.com](http://www.pillartopost.com).**

**Within these resources you will be able to provide your client with a range of costs associated with replacements and maintenance within the home. If you do not have a Pillar To Post Cost Guide brochure contact your local Pillar To Post home inspector and he/she can supply you with a copy of this useful resource. (see the next page for more detailed information)**

9

2015/04/25





Call your local Pillar To Post home inspector to get the Pillar To Post Cost Guide Brochure



Go to the Pillar To Post website - [www.pillartopost.com](http://www.pillartopost.com) - and access the Real Estate Professionals area. Here you can access the online version of the Cost



Guide along with a wealth of other real estate tools and resources for professionals.



### Check Your Knowledge

Answer the questions below in the spaces provided

1. Based on the principle of a "normal maintenance pattern" what % per year can the client expect to pay?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. What is the definition of deferred maintenance?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. If there is a deferred maintenance situation what can your client expect to possibly pay in the first years of owning the home?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. What is the normal maintenance cycle for the three systems below? Insert the number of years each can generally be expected to last.

- (a) Conventional furnace lasts \_\_\_\_\_ years
- (b) Galvanized steel plumbing last about \_\_\_\_\_ years
- (c) Asphalt shingle roof surface last \_\_\_\_\_ years



Chapter  
**3**

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CHAPTER 3  
Older Systems

## Chapter 3

### Older Systems

The three systems that are often the biggest surprise to the home buyers are:

- Electrical
- Heating
- Plumbing.

### Electrical

To understand whether or not the electrical system is obsolete, it is important that your client considers various factors.

#### Is the electrical system inadequate for lifestyle?

We cannot automatically assume that the electrical system is obsolete, simply because it is older. In fact, some buyers may have very little demand for electricity – the classic example is an older person living alone. On the other hand, the buyer may be a young couple with three children (laundry, hot water, cooking, hair dryers, humidifiers and portable heaters etc.)



*An obsolete electrical system may work fine and be completely safe for a single, older person but be totally inadequate for a young family.*

#### Is the electrical system unsafe?

Old electrical systems are not necessarily unsafe. However they may have been tampered with or altered over the years. In some cases this may have been done in a very professional manner, in other cases amateur jobs are not uncommon.

Electrical systems may be unsafe if there is evidence that:

- The electrical system was improperly extended and called to supply more than was ever intended
- Improper modifications have been made over the years.

Here is an example. An old electrical system only has a few circuits for the entire home. This was fine in its time. But current residents have big electrical demands and they find that they are constantly blowing fuses. Often the quick fix (improper and dangerous fix) is to insert a fuse that is rated for higher amperage. This stops the nuisance of blowing fuses but it makes the circuit unsafe.

#### Is it difficult to get insurance based on the electrical system?

It is possible that the insurance company dictates that the system must be upgraded. For example, most insurance companies will not insure houses with Knob and Tube wiring. Most will not insure houses with 60 amp service. Even if the 60 amp service is adequate for the home and the electrical system has been well taken care of, to the insurance company it's obsolete and therefore dangerous.

Aluminum wirings, although not as well-known in insurance circles, can sometimes be an insurance issue as well.



### Knob and Tube Wiring



This image shows knob and tube in the upper foreground and standard cable attached to the beam in the background. Knob and tube wiring is characterized by individual strands of wire supported on ceramic posts or knobs. As the wire passes through a joist or wall stud, it is protected by a ceramic tube.



In this photograph modern cable has been inappropriately spliced into the knob and tube wires. This is a safety concern

In the previous photographs, the knob and tube wiring is exposed and clearly visible in the basement. Sometimes there is new wiring in the basement and on the main floor with old knob and tube wiring inside the walls and ceiling on the second or third floor. Knob and tube would only be discovered if switch boxes or outlets are opened.

It's a surprise to the buyer when knob and tube wiring is found on an upper floor because the breaker panel may be brand new and the listing may have indicated that the electrical system has been upgraded. It's even more of a surprise, because sometimes it means the insurance company will demand that the knob and tube wiring be replaced.



*A home buyer should be prepared for the possibility of finding knob and tube wiring in an older home.*



This image shows knob and tube wiring. It would not have been visible if the cover plate had not been removed from this electrical receptacle.



*If you would like to learn more about electrical systems and how they impact your dealings with clients, you should contact your local Pillar To Post home inspector who can provide you with an in-depth presentation on this subject along with a corresponding student workbook*

## Heating

In some old homes you occasionally see very old heating systems that just refuse to quit. These typically include:

- Old cast iron boilers
- Old 'octopus' furnaces



These old boilers seem to last forever. In fact, you can see them as old as 75 years, still working. It is hard to convince a home owner to replace a system that is still working. The economics just don't compute. It's true that this old boiler is very inefficient but it will cost \$4,000 to \$5,000 to remove and replace. Even if the client saves \$500 a year

on his heating bill with a new heating system, it's still hard to justify the upfront expense.



This is an old oil fired 'octopus' furnace. Air moves by natural convection through the furnace and through the home. That is, there isn't even a blower to move the hot air. When a client replaces one of these, he/she will usually have the added expense of removing the old furnace and likely some ducting modifications

Today, heating registers are placed beneath windows at outside walls of the home. The ducting for the old octopus furnaces ran up through a central wall and branched off into each room. This is one clue that can tell you whether there used to be an old octopus furnace in the home. If the heating registers branch from an inside wall, there was probably an octopus furnace at one time. This should be a flag to look for an abandoned fuel oil tank—see the section on Environmental Issues.



*If you would like to learn more about furnaces and how they impact your dealings with clients, you should contact your local Pillar To Post home inspector who can provide you with an in-depth presentation on this subject along with a corresponding student workbook*

## Plumbing

The main considerations when determining whether the plumbing system is obsolete are whether the system has galvanized steel pipes and/or a lead water main.

### Galvanized Steel Pipes

Galvanized steel pipes were used for water mains and for interior distribution piping from 1920 to about 1950. The problem with galvanized pipe is that it corrodes-- from the inside out. The functional life cycle is about 40 years and it has not been used for about 50 years, yet we still find lots of galvanized steel piping in older homes.

Since galvanized steel systems are past their functional life cycle, we usually recommend that it be replaced for two important reasons:

- Firstly, there is a good possibility that it will corrode through and start to leak. This could cause damage to the plaster etc.
- Secondly, the piping may become nearly non-functional. As it corrodes, the inside diameter of the pipe gets smaller and smaller until very little water can flow through. The water that does make it through is often discolored with rust.



This image shows a water main made of galvanized steel and as you can see it is very badly corroded – actually it has started to leak. This is a flood waiting to happen.

### Lead Water Main

Lead supply pipe was used for water mains up until about 1930. Many homes still have lead service lines. Lead line is characterized by – a large “bulb” of lead where it joins to galvanized steel or copper upstream of the shut-off valve.



This image shows a lead water main. It is very easy to distinguish from copper but it looks a lot like galvanized steel. The distinguishing characteristics are the bulb you see in the centre of the photograph. The other way to find out if it is lead or galvanized steel is to test it with a magnet. Lead is non-magnetic while galvanized steel is.

**The main concern most home buyers will have if a lead water main is discovered is health.** The risk is reduced to a minimum if the occupant of the home is diligent about flushing stagnant water out of the pipes. Let the water run until it is cold before taking drinking water from the tap. On a day to day basis the oxide layer inside the lead pipe will limit the amount of lead in the water. If the water sits stagnant in the pipes for a length of time, a significant amount of lead may have accumulated in the water.



### Lead Based Solder

*The reality is - most people will want to replace the water main as soon as possible due to the serious health risks.*

In the past, the solder used to join copper piping for potable water supply was made of tin and lead. While there is very little solder exposed to the potable water in a typical plumbing system, some of your clients will be concerned about the lead content. Modern solder does not contain lead.

Many of the plumbing systems out there today do have the old solder on the pipes. The common sense approach is to run water until it runs cold before drinking it. This is a good idea for lots of reasons including flushing out any water with traces of lead.



*If you would like to learn more about plumbing and how it impacts your dealings with clients, you should contact your local Pillar To Post home inspector who can provide you with an in-depth presentation on this subject along with a corresponding student workbook*



*Check Your Knowledge*  
*Answer the questions below in the spaces provided*

1. What are the top three concerns that clients have about an older electrical system?

- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_

2. If knob and tube wiring is found within the home – how can this impact your client's home insurance?

\_\_\_\_\_  
\_\_\_\_\_

3. What are the two very old heating systems you can find in an older home? Do these always need to be replaced? Why or why not?

\_\_\_\_\_  
\_\_\_\_\_

4. Why is it recommended that a client replace galvanized steel systems that are past their functional life cycle? Give two reasons.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



5. If a lead water main is found – what is the main concern for the home buyer?

\_\_\_\_\_  
\_\_\_\_\_



Chapter  
4

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## CHAPTER 4 Energy Efficiency

### Energy Efficiency

Unless a concerted effort has been made to upgrade, older homes tend not to be very energy efficient. The two areas where older homes are lacking are:

- Insulation levels
- Windows

### Insulation

Many old homes have little to no insulation. This is typically because it is not economical to upgrade.

There are two exceptions to this however and they are:

- The attic area if accessible
- The basement or crawlspace if accessible

While most attics are easy to upgrade with insulation, the walls often are not. For example, old solid masonry homes often don't have much of a wall cavity to add insulation to. Even if there is a wall cavity, upgrading insulation within walls is fairly expensive.

Chapter  
4



*Most old homes are insulated when renovations are done*

## Windows

Many old homes have old windows that are not very energy efficient. These typically fall into the categories of:

- Single pane windows
- Windows that are not tight fitting

Often only the windows that face the street get upgraded (visual appeal to home)



*New windows save energy but it's a very expensive upgrade*



This image shows a window that has a double slider. This type of window construction does not seal very well and is not very energy efficient



This image shows a single pane double hung window. You can see there has been an attempt to seal the gap around the window. There is a storm window as well. Sealing the gap properly will save energy. Most people want to be able to open the windows in the summer. The putty around the window will have to be replaced every year. A better approach is weather strip (allows the window to slide open and closed). The other problem with putting the window shut in the winter is that the window can no longer be used as a fire escape route.

Note that especially in homes well over a century old, original glass panes are a treasure and often considered a valuable part of the of the home. The rippled, uneven panes of glass have survived without breaking. You would never want to suggest a client do anything to diminish the value of a truly antique home. Their inefficiency may be “the cost of character”!

## Controlling Heat Loss

Heat loss in a home happens in two ways

- **Convection:** Hot air drafting through openings in windows doors etc.
- **Conduction:** Heat travels through materials that make up the house structure and exterior envelope – for example, on a cold day, if you put your hand on the inside of a pane of glass, it feels cold. Heat is conducting from inside the house, through the glass to the exterior



*Insulation is designed to slow down conduction of heat while weather stripping etc. is designed to slow down convection of heat.*

*In an old home, the biggest saving in energy for the least cost is to cut down on convected heat loss. Sealing the gaps is usually the first thing to do in an old house. This means weather stripping doors and windows and caulking gaps etc. This includes installing glass doors on the fireplace (or at least close the damper)*

*There is no point for your client to spend a whole lot of money insulating the walls of the house if the windows and doors don't fit to stop the convected heat loss.*

*Once the gaps are appropriately sealed then your client may want to look at which areas to add insulation*

There are companies that specialize in conducting heat loss inspections of homes. The idea being to help the owner prioritize where to spend money to save energy. Some home inspectors will also provide home energy audits as an additional service offering to the core home inspection. This is provided at an additional fee to the home inspection itself. Your client can consult the local Pillar To Post home inspector to inquire about a home energy audit.



### *Check Your Knowledge*

*Answer the questions below in the spaces provided*

1. In terms of energy efficiency, what are the two areas where older homes are lacking?

- (a) \_\_\_\_\_  
 (b) \_\_\_\_\_

2. What is the definition of convection heat?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. What is the definition of conduction?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



4. In an older home, which should the client concentrate on improving first to control heat loss— convection or conduction? Why?

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Chapter  
5

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CHAPTER 5  
Environmental Issues

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## Chapter 5

### Environmental Issues

Although environmental issues are vast and are increasingly becoming more and more publicized in the media, this workbook will focus on three important environmental issues that are associated with older homes. They are:

- Oil tanks
- Asbestos
- Lead

### Oil Tanks

#### Underground Oil Tanks

Underground oil tanks present both a serious environmental issue and an important insurance issue. Oil tanks are a problem for everyone because of the uncertainty involved. If the tank has been leaking for many years, the environmental clean-up can be very expensive. The contaminated soil would have to be removed and incinerated etc. Leaking oil tanks are not only a concern as contaminants of the soil but of equal importance is the possible contamination of the groundwater.

### Above-Ground Oil Tanks



This image shows an oil tank in a basement. This is a fairly new tank. These tanks corrode from the inside out. Little bits of water may get into the tank while filling. Eventually, there is a small amount of water in the tank. The oil floats on the water. The water corrodes the tank at the bottom from the inside.



*Many insurance companies do not want to insure the home if the oil tank is older than 20 years. A basement flooded with oil would be a very expensive clean up (consider the smell and the possibility that oil goes into the drain etc)*

## Asbestos

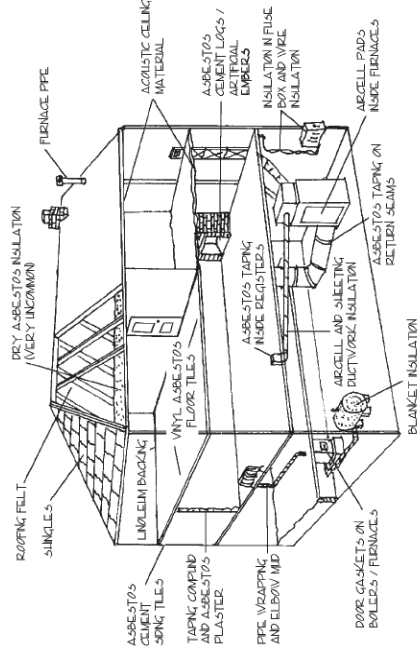
While asbestos is no longer used in building materials, it's in many materials that were used in the past. Older homes may have building materials that contain asbestos. Asbestos is considered to be a health threat to people because the fibers can be inhaled and are difficult to remove from the lungs.

Everybody is exposed to low levels of asbestos (ambient asbestos). Higher concentrations are known to cause health effects. Generally, it is people that have worked with asbestos that are at risk.

In a residential home, you may be exposed if an asbestos containing material is disturbed or is disintegrating and releasing fibers into the air (friable). While it's unlikely that occupants of the home are exposed to significant levels of asbestos on a day to day basis, more significant exposure is possible during renovations or repairs that involve asbestos containing materials.



This image shows a pipe that is wrapped in a material that may contain asbestos. Generally it cannot be determined if it's asbestos without testing it. Note that this is not part of a core home inspection.



### Potential asbestos location in a house

Many of these components may have been replaced – or covered over time.

- The shingles are likely to be have been replaced, but some might still be hidden under a layer of newer ones.
- Roofing felts could still be there
- Floor tiles containing asbestos are still common in older homes and many have simply had newer floor coverings laid over the top.
- Vermiculite insulation is one of the common components we are finding, often buried under newer insulation and it can contain asbestos. It will limit the use of the attic and access for adding new wiring, alarm systems and computer cable, or even for new ventilation systems or access to repair fans. Rodents or birds, getting into the attic will disturb it too. It will tend to lower the value of the house. Best to get rid of it.

- Tape on heating ducts is easier to deal with, simply encapsulate it – put new duct tape over it – don't rip the old stuff off and spread the fibers.
- Asbestos insulation on older furnaces and hot water heating systems will cost a premium to remove and it will have to be removed whenever a repair is needed.
- Asbestos cement siding can be covered with newer material, except that one will be cutting through it and spreading asbestos-laden dust whenever one changes windows or cuts a new hole for a fan, or direct vent heater or any other opening. It can be hazardous for workers as well as for occupants in these circumstances.



*The common theme is, if the material contains asbestos, disturbing it will make things worse because if the asbestos is in bad shape (friable) the asbestos fibers get into the air. Breathing these fibers can cause cancer*

*While encapsulation is often a viable solution, many home owners will want the asbestos out!*

## Lead Based Paint

Older paint contains lead so logically older homes may have paint with lead in it. Paint flakes and paint dust may find its way into a toddler's mouth. Wear surfaces like door jambs create paint dust. If the paint dust is picked up on a toddler's hands, it will end up being ingested.

Lead based paint also poses a risk to contractors that are scraping or removing lead based paint. Lead can find its way into the body by breathing lead dust.

The general rule is that any paint before about 1980 could contain some lead. The older the paint the more lead –

- 1940 to 1960 – lots of lead in the paint

38

2015/04/25



- 1960 to 1970 – less lead in paint
- 1970 – 1980 – Government intervention and complete elimination of lead in paint
- 1978 – Lead based paint banned from housing in the United States

## Testing for Lead Paint

The only way to know for sure is to test the paint. If the house is very old, you can be sure it has lead based paint unless substantial remediation has already taken place. Testing for lead paint is not part of the core home inspection. There are people that specialize in testing for lead based paint. There are disclosure regulations in most States regarding the presence of lead based paints.

39

2015/04/25





### Check Your Knowledge

*Answer the questions below in the spaces provided*

1. What are the implications for your client if the home has an above ground oil tank?

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2. Generally where is asbestos found in a home?

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3. What are your client's options if asbestos is found in the home?

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4. What are the risks associated with lead paint in a home?

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Chapter  
6

CHAPTER 6

A Home with Character

If we revisit our initial assumption that there are two types of buyers – those that have lived in and experienced an older home vs. those that have not – we begin to unravel the buyers’ motivations for purchasing an older home. Those that are of the “old home” sort are obviously “sold” on the benefits of purchasing an older home knowing that they will need to have trade offs for the possible fixes that need to take place to make the home habitable and safe. **But even the most die-hard “older home” type can be put off by the more visible signs of an aging older home.** Keep in mind that this older home buyer profile is looking for charm – so “in your face” visible aging may be troublesome for them.

Let’s do a quick comparison of advantages and the “visible disadvantages” of older homes

*Advantages*

- Usually in an established neighborhood
- Charming period details (character)
- Landscaping may include mature trees
- Window coverings and appliances are often included
- Usually better quality construction and finishing materials
- Workmanship is typically superior than newer homes

*Visible “Disadvantages”*

- Bulging plaster
- Worn hardwood floors
- Sagging floors

## Walls

### Causes of Visible Signs of Aging



This image shows the inside a wall of an old house. What you are seeing is the plaster and wood lath. The plaster is applied over the wood lath and squeezed through the gaps between the wood. The plaster then slumps (this is what we are seeing here – the slumping plaster from inside the wall). This forms what we call plaster ‘keys’. It is this slumped plaster that holds the plaster surface to the wood lath. Over time, these keys break and the plaster surface gets loose. Eventually you have large areas where the plaster is bulging. It eventually cracks and falls.

### Let’s look at the history

There was an era in between, and overlapping, the use of plaster and drywall. During this time, material used for the substrate was called Gypsum lath. Gypsum lath is a cross between plaster and drywall. Officially it is a plastering process. In this process sheets of gypsum 16 inches wide, and 48 inches long, were nailed to the wall. Plaster was applied over top in several coats. This system was used from about 1930 to about 1960. Some people are still using this system today as a high-end alternative to drywall.

The interesting thing is that it is very easy to spot this process because after many years, you can see the outline of the gypsum sheets

Next came drywall which is the standard of construction these days. But - how do you tell if the home is dry walled or plastered? Sometimes it’s not easy, but a plaster wall will not have sharp corners and edges. In addition, a plaster system does not sound as hollow when you tap on it. Distinguishing materials by sound takes some experience. Sometimes you can find a damaged area in the basement, attic, or closet where you can see the Gypsum lath.

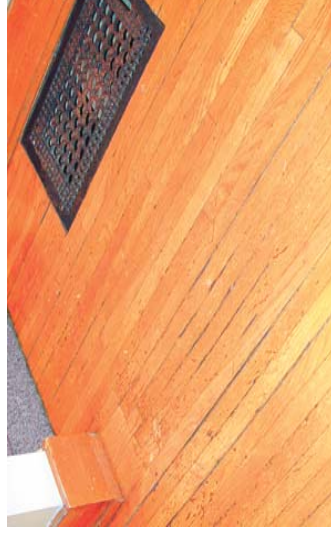


**Your Client May Ask:** *Why are the walls sagging?*

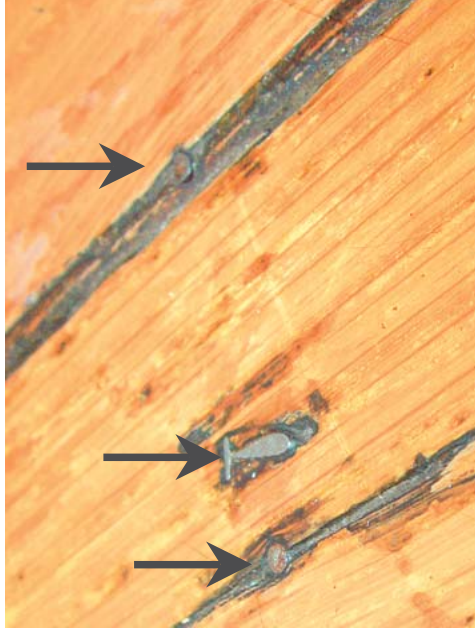
**Your Possible Answer:** *It’s difficult to say but - sagging is pretty common in older homes simply because of the way they were built and the materials that were used at the time.*

## Worn Hardwood Floors

Original hardwood floors are often an enormous selling point in an older home because of the richness, character and quality of this wood. If the hardwood floors are worn, home inspectors strictly do not report this as it is considered a cosmetic issue and is therefore not part of their standards. But when are hardwood floors a cosmetic issue and when are they a deficiency in the home? The answer lies in whether the floors can still be sanded.



This image shows a hardwood floor that is badly worn by foot traffic. A home inspector would consider this a cosmetic issue because floors can be sanded and finished quite inexpensively.

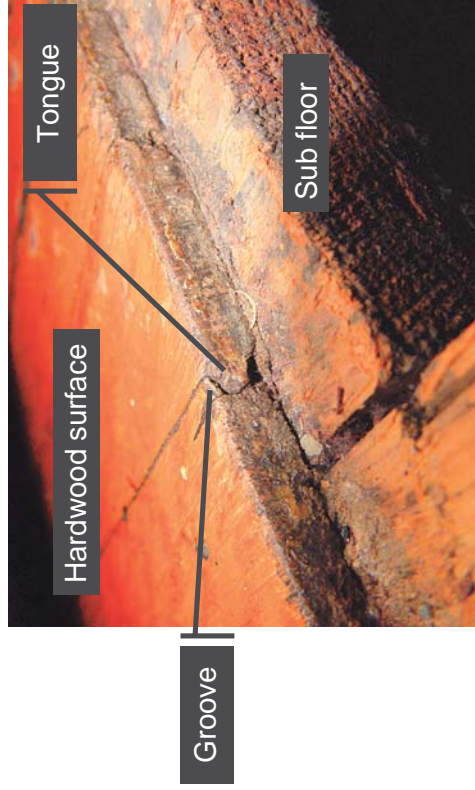


With an old home, we sometimes run into a problem that the floors have been sanded so thin that your client cannot sand it any more. This image shows a floor that has been sanded too many times exposing the nails that hold the boards in place.



*The bottom line is if there is enough wood to sand the floors, it's a cosmetic issue. If your client has to tear out the existing hardwood floor and replace, it is quite expensive and generally will be commented upon in your client's home inspection report. Bear in mind furnishings may conceal evidence of over worn floors from a home inspector.*

### How does it work?



The hardwood floor is applied over the softwood sub floor. Each board is held in place with a nail driven diagonally through the tongue. Then the groove from the next board covers over the nail and the tongue from the first board. If you sand too much of the surface away, you expose the nails holding the hardwood in place.





**Your Client May Ask:** Will I need to replace these floors (there are numerous exposed nails and bare patches)?

**Your Possible Answer:** This will be your decision – but older homes will often have been sanded many, many times so there’s nothing left to sand. You’ll need to consider this not only from a cosmetic viewpoint but also from a safety viewpoint as well.

### Floor Squeaks

Most old floors squeak. Sometimes it’s just a matter of the buyer getting used to it. To solve the squeak a contractor will typically need to be able to get at the sub floor. At the end of the day this can be a complicated, expensive and impractical process. Usually, client will view squeaks as part of the character and charm of the home.



**Your Client May Ask:** Will I need to replace these floors (they squeak)?

**Your Possible Answer:** This will be your decision – but most likely you’ll get used to it pretty quickly – at least you’ll know when your teenagers get home late! Most people think that replacing a squeaky floor is pretty impractical due to the expense and the disruption. Floor squeaks are not a sign of failure.

### Sagging Floors

All floors (new and old) sag a little. The floors in an old home may sag even more as the floors ‘creep’ a little over time. Each home has to be evaluated on a case by case basis. As long as there is no associated structural concern, sagging floors are considered a cosmetic issue by home inspectors and do not fall into their reporting standards. Again sagging floors should be looked upon as part of the character of the home as to remedy them can be very expensive and impractical.



**Your Client May Ask:** Will I need to replace these floors (the floor sags slightly in various places)?

**Your Possible Answer:** This will be your decision – but all homes, new and old have sags in the floor. After we have our home inspection, we’ll know more. Assuming there’s no structural damage (and we’ll know more after your home inspection) you’ll probably just get used to them and they’ll just become part of the charm of this home.



### Check Your Knowledge

Answer the questions below in the spaces provided

1. Name some advantages of older homes?

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2. What are some of the visual disadvantages in an older home for you clients?

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3. What would you say to a client who is concerned about sagging in the walls of an older home?

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4. What would you say to a client who is concerned about the floors squeaking in an older home?

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5. What would you say to a client who is concerned about some slight sagging in the floors of an older home?

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Chapter  
**7**

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CHAPTER 7  
CEP Quiz

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### Quiz – Older Houses

Name: \_\_\_\_\_

1. How much should one budget for maintenance per year, on average?  
\_\_\_\_\_  
\_\_\_\_\_
2. Name 2 obsolete electrical components that can be difficult to insure?  
\_\_\_\_\_  
\_\_\_\_\_
3. What kind of attic insulation is known to contain asbestos?  
\_\_\_\_\_  
\_\_\_\_\_



## Chapter 8

### CHAPTER 8 Presentation Evaluation

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**Presentation Evaluation – Older Homes**

**TECHNICAL CONTENT**

	Excellent	Average	Poor	No Opinion
Presenter's knowledge of subject matter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to keep you interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussion / overview / recap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How well did this course meet your expectations?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

**ORAL PRESENTATION**

	Excellent	Average	Poor	No Opinion
Explanation of objectives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voice (volume, clarity, speed)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answers question clearly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

**VISUAL PRESENTATION**

	Excellent	Average	Poor	No Opinion
Voice (volume, clarity, speed)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Answers question clearly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effectiveness of visual aids	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presenter's eye contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

**MATERIAL HANDOUTS**

	Excellent	Average	Poor	No Opinion
Effectiveness of handouts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Comments:

Please complete this portion:

Location: _____	Date: _____
Name (optional): _____	License# (optional): _____



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