HOME SYSTEMS SURVEY

Use this worksheet to evaluate the major repair needs of your house and garage. The information will help you identify and understand the condition of the main systems and to estimate when these systems might need repair or replacement. Repair costs are best determined by obtaining three comparable, well-written bids from reputable contractors. But our accompanying handout, “Cost Information for Major Repairs,” will give you a rough idea of what to expect.

Please note: This Home Systems Survey covers only the major systems, not everything in a house which might need repair, and is based on Building Code requirements in Cleveland Heights.

<table>
<thead>
<tr>
<th>Repair Now</th>
<th>Repair 1-5 Yrs.</th>
<th>No Immediate Need</th>
</tr>
</thead>
</table>

- **Shingled Roofs** — Asphalt shingled roofs have an average life expectancy of 20 years. Curling, cracking, torn or missing shingles as a general condition indicate it’s time for replacement. If curling is minimal, you may have a couple of years before replacement is absolutely necessary, but leaks won’t always show, and leaks can damage the roof frame. Inside, look for signs of leakage (water stains) especially around chimneys and on the attic ceiling.

- **Flat Roofs** — Flat roofs (usually over porches and garages) covered with asphalt roll roofing usually last no more than 3 years. Alligator-type cracks, torn paper or split seams are signs that replacement is needed. Water sitting in puddles (or signs of it) could indicate some damage to the wood below the roof. (Newer roofing products have a longer life expectancy, usually 10 - 20 years.)

- **Foundations** — Brick walls that appear to be slanting or sinking into the ground may require some footing work below ground level to provide adequate support. In some cases, they will need replacement. Cracks in the mortar between the bricks are usually easily repaired. Cracks that break the bricks, however, usually indicate a structural fault and should be inspected by a qualified person. Check the condition of basement walls, as well as exterior masonry.

- **Exterior Wood** — Wood siding and/or wood siding shingles that are severely bowed or cracked need to be replaced. Rotted wood or wood that is soft to the touch indicates replacement is needed. Small piles of sawdust (usually around porches, but sometimes found elsewhere) may indicate the presence of wood-boring insects, such as termites. If you have any concerns, have the house inspected by a professional.

*(continued)*
Gutters and Downspouts — Galvanized gutters can be identified by their dull gray color when not painted or by signs of rust on the paint. If you see rust, expect to replace the gutter system within a year or two. Aluminum gutters have a much longer life expectancy, if securely nailed in place and not dented by ice, ladders, etc.

Exterior Paint — If the paint is deteriorating (such as blistering or cracking) other than from normal wear, there may be some moisture problems that need to be corrected prior to painting. Older homes (in any community) will likely contain lead-based paint. Lead-safe work practices should be used when disturbing painted surfaces.

Driveways and Walkways — With proper maintenance, asphalt driveways have a life expectancy of 20 years. If asphalt covers concrete and is breaking up, or if more than a few potholes, large cracks, or chunks of asphalt are missing from the driveway, it is time for the old drive to be dug out and a new drive installed. If cracks are not major, asphalt drives can be resurfaced with 2” of new asphalt; hairline cracks can be sealed to last a few more years.

Concrete driveways have a life expectancy of 20 years. More than a few craters or large cracks where adjoining sections are not level indicate time for replacement. Concrete can be patched, but patches generally last only a year or two.

Maintenance of public walks is the homeowner's responsibility. Evaluate walkways using the standards for concrete driveways. Individual sidewalk blocks can be replaced. Blocks that differ in height and pose a trip hazard will have to be leveled.

Note: If you receive a violation to “replace” a driveway or sidewalk block, that’s what you will have to do.

Electricity — The electrical system is hard to evaluate without experience. Fuses and circuit breakers are equally good, but circuit breakers indicate a more modern system. The more fuses or breakers, the better. Find out how many amps of service the house has; if less than 100 amps (considered minimum for today's use), you should consider upgrading the system.

Knob and tube wiring (with wire wrapped around porcelain knobs and passing through porcelain tubes) is an older style of wiring, but in good condition is perfectly adequate. A more modern style uses Romex, which has a white or black flat rectangular casing around the wires. A combination of the two systems is common; the major concern is whether connections were made properly.

Furnace or Boiler — The life expectancy of a furnace or boiler is about 25 years. It is hard to evaluate the condition of a heating unit from its exterior appearance. Look for signs of excessive rust at the base (where rust would eat holes through the metal). Open up the covers and look inside for excessively rusted burners. If in doubt, have the unit inspected by a heating tradesperson.

(continued)
Plumbing — Older plumbing systems used galvanized pipe, which can be identified by threads on the ends of the pipe, a gray color if not painted, or signs of rust. In most cases, galvanized pipe will clog on the inside and eventually need replacement. Check the water pressure on the second floor for inadequate flow caused by such clogging.

Copper is the more modern system. It can be identified by its color and the presence of silver-colored solder at joints. Plastic pipe may be used for new and replacement lines (PEX or CPVC for water lines, PVC for drain lines), but adequate electrical grounding should be ensured. Check the water line between the water meter and the street. (The water meter can be found in the basement on the wall closest to the street.) If the line is galvanized, expect to replace it; if copper, it has already been replaced.

A hot water tank has an average life of 5-10 years. Look for general age and signs of puddles around it on the floor.

Basement — Water stains and some mortar missing from between bricks are common, as are cracks in the basement floor. Excessive amounts of water running in through the walls indicate foundation waterproofing problems. To excavate and re-waterproof the exterior basement walls is expensive; however, this extensive a remedy is seldom needed.

Cracks that form in the joints between the bricks indicate normal settling, and aren’t generally a cause for concern. Cracks that don’t follow the joints, but break the bricks, usually indicate a structural fault and should be inspected by a qualified inspector. These repairs can be very expensive.

Sewer System — A depression or valley near the center of the front yard that extends from the house to the sidewalk usually indicates a problem with the sewer system (most often, broken drain tiles under the ground). A yard that floods with unusual frequency may also indicate a problem. (Sluggish drains inside the house can usually be cleared by snaking them out.)

Garages — From the inside, check the bottom sill (where the walls meet the ground or floor). This is where rot usually starts. Check for rot in the roof deck (the planking or plywood under the roofing material) and in the framing that supports it. Check the condition of the side walls, concrete floor and flat roof, using the standards described previously. Finally, step outside and look to see if the garage is leaning in any direction.