Swimming Pools: To Inspect or Not to Inspect?

Bruce Barker

That is the question.

Whether 'tis better to suffer the slings and arrows of outrageous attorneys and disgruntled clients or, by disclaiming pools, avoid them.

That's a question inspectors are asking themselves more frequently each year. Once limited to the mansions of the wealthy, today, home inspectors are finding swimming pools at even the most modest homes, particularly in the Sunbelt. When there's a pool on the property, a home inspector must be prepared to deal with it either by inspecting or disclaiming it.

ASHI Standards of Practice (SOP) allow inspectors to disclaim pools. In markets where pool inspections are not expected as part of a home inspector's services, disclaiming pools may be a wise move. The marginal revenue from pool inspections may not compensate for the risk assumed. In markets where pool inspections are expected, home inspectors may best serve their clients by conducting a limited inspection designed to determine if the client needs to have it inspected by a specialist. This approach is consistent with the generalist nature of a home inspection, and may help limit liability concerns.

Set Realistic Expectations

The first step to using the limited inspection approach is to provide the client with a clear, written definition of the objective and scope of your pool inspection. By including the definition in both the inspection agreement (reviewed by your attorney) and in your report, you'll have the opportunity to review it twice with the client—before and after the inspection. Here's one example of a defining statement:

> The objective of our limited visual pool inspection is to determine if the pool and related equipment may benefit from a more thorough inspection by a qualified pool specialist. The scope of our inspection includes a limited visual inspection of the pool electrical system, primary circulation system, pool barrier system, the pool interior surface and surrounding deck. We do not dismantle components such as filters, pumps and heaters. We do not test water chemistry. We do not test or operate pool heaters, cleaning systems, control valves, chemical injectors or similar components.

Charging Extra Increases Risks

It is tempting to pocket an extra few dollars for even a limited pool inspection. In my opinion, those few dollars could expose you to increased liability. The client, and the law, ▸▸▸

may expect a higher standard of expertise and care from a home inspector who charges extra for this service. This potential for liability is contained in tort law. In theory, the standard of care required of a person who claims expertise and charges for that expertise is greater than that required of someone who claims no special expertise and performs a service for no (additional) compensation. This theory will not protect you against negligent performance within the scope of the limited visual pool inspection; however, it may help protect you against claims that are out of scope or fall within the gray areas that plague home inspectors.

The decision whether to charge extra for a pool inspection is a business decision based on your own assessment of risk versus revenue.

If you carry errors and omissions insurance, you may wish to verify that pool inspections are covered by your policy and the conditions under which that coverage applies. You don't want to find out you're not covered after you have a problem with a pool inspection.

If you decide to do limited pool inspections, you'll find that some of the inspection procedures would be part of a normal home inspection, others are unique to pools, such as the barrier requirements

Pool Barrier Requirements

One of the important services you can provide in a limited pool inspection is reporting on pool barrier deficiencies. In 2001-2002, drowning was the second leading cause of all injury deaths in children aged 1-14 years. Pool barriers save lives. Pool barriers prevent injuries. That's why pool barrier requirements are covered in the International Residential Code (IRC2003) Section AG105. These requirements may also apply to spas and even water features greater than a certain depth (18 inches in some jurisdictions). State and local governments may have different regulations. Some require retrofitting existing pools. Even for a limited pool inspection, the home inspector must know all the applicable regulations in his or her area.

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Basic pool barrier requirements include the following:

- a fence at least 48 inches tall with no horizontal bars or other components that would allow a child to climb the fence;
- self-closing and self-latching gates with latches at least 54 inches above grade;
- self-closing and self-latching doors for all doors from living areas that provide access to the pool with locks at least 54 inches above the floor;
- locks at least 54 inches above the floor on all windows from living areas that provide access to the pool. Heights are usually measured on the side of the barrier away from the pool.
- a pool cover may substitute for other barriers if the cover is motorized and approved by local authorities.

Pool Electrical

Service to the pool equipment area often terminates in a subpanel near the equipment, which is inspected the same as any subpanel, including proper separation of neutral conductors and equipment grounding conductors. Because pool equipment requires an insulated grounding conductor, Romex is not an acceptable wiring method for pool equipment. Service to some pools terminates in or includes one or more timer boxes. Verify that the box is securely attached to its support and check for unprotected wires. Often the protective cover over the timer box interior connections is missing, which creates a significant electrical contact hazard.

Receptacles and switches may not be located within five of the inside edge of the pool. Receptacles serving the circulation system may be located between five to 10 feet of the pool if they are single, locking and grounding receptacles and are connected to a working GFCI. General purpose receptacles may not be located within 10 feet of the inside edge of the pool, and all receptacles within 20 feet of the edge must be on a working GFCI. One general purpose, GFCI protected, receptacle must be located between 10 and 20 feet from the inside edge of the pool. Switches and receptacles should have appropriate and intact weatherproof covers.

Light fixtures and ceiling fans installed within five feet horizontally from the inside wall of the pool must be at least 12 feet above the maximum water level, with some exceptions for GFCI protected fixtures. Verify that any lights inside the pool

operate. Lights inside the pool should be GFCI protected, except for low voltage and fiber optic lights. If you see water in the lamp housing, do not activate the light. Recommend expert evaluation. There may be a leak in its sealed housing.

Overhead supply or service drop conductors must be at least 18 feet above the water surface and 14 feet above any diving board. Additional clearance is required if the wire is not supported on and cabled together with a grounded wire. Some jurisdictions prohibit service drops over pools.

Bonding and grounding systems are often disconnected or missing. All metal parts of the pool structure and the electrical and circulating systems are required to be bonded together. Bonding requires at least #8 solid copper wire. The visible components required to be bonded include the electrical equipment associated with the circulation system, including the pump motor, metal junction boxes and metal transformer and timer enclosures, and any metal longer than four inches within five feet of the pool. This includes metal windows, pool cages, metal columns and similar metal components.

Components required to be grounded include underwater lights (except low voltage lights listed as not requiring grounding), all electrical equipment within five feet of the inside pool wall, all electrical equipment associated with the circulating system, metal junction boxes and transformer enclosures, and panelboards that supply any electrical equipment associated with the pool.

Circulating System

A basic pool circulating system includes a pump with a motor, a filter, control valves and pipes. More complex systems may have accessories such as a chlorinator and additional pumps, valves and pipes to operate a spa and/or a cleaning system.

Start your circulation system inspection by observing the general condition of the pool and equipment. The water level should be at least an inch above any skimmer and suction ports. The water should be reasonably clean, indicating recent system use. The pool equipment should appear in reasonable condition. If you have any doubts about the condition of the equipment or pool, don't activate the pump(s). Recommend expert evaluation.

Observe the main drain and other suction ports. All suction ports should have anti-vortex covers to reduce the chance of holding someone underwater through the force of the suction. New pools must have two suction outlets separated by at least three feet, and the circulation system must be equipped with an approved atmospheric vacuum relief. In older pools you may find uncovered suction ports and other entrapment hazards that can prove dangerous.

Pump switches are often located in a timer box near the pool equipment. Activate the pumps near the beginning of the inspection and let the pumps run for 20-30 minutes to determine if there are any leaks in the visible circulation system components. Then observe around the filter, pump(s), pipes and valves, and any pool heater for signs of water leaks.

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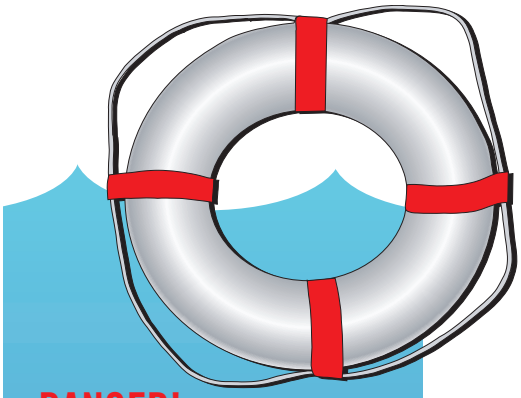
Observe the basket strainer on the suction side of the pump. If it is not full of water after two or three minutes, turn off the pump and recommend expert evaluation. Do not let a pump run dry and risk damaging it. Observe the basket strainer at least 10 minutes after water circulation has begun. If new bubbles constantly appear in the basket strainer, there may be a leak on the suction side of the system. Recommend expert evaluation.

Observe the pressure gauge on the filter. The gauge reading depends on many factors and can change based on valve settings and the system components being used. A very low reading when there is a reasonable amount of water flowing from the returns may indicate a malfunctioning gauge. A very high reading may indicate a malfunctioning gauge, a dirty filter or a constriction somewhere in the system. Recommend expert evaluation if the gauge reading appears very high or very low.

It is usually not a good idea to activate pool heaters during a limited pool ▸▸▸



DANGER! POOL AHEAD!

Pool inspections carry with them the potential of significant liability. Pool accidents can be catastrophic resulting in death and long-term physical and mental disabilities. According to the Centers for Disease, Control and Prevention (CDC), drowning has been a leading cause of injury deaths in the United States for decades and small children are at highest risk, particularly around residential pools. Pool repairs can also be catastrophic, if paid for by the home inspector. With this in mind, some home inspectors opt for providing a limited pool inspection, based on a carefully crafted and attorney-reviewed protocol.

inspection unless you can do so using clearly marked operating controls. Unless you know the proper valve settings and heater operation procedures, you may be wise to leave a sleeping heater lie. You can perform a quick visual inspection to determine if expert evaluation may be necessary. Observe the heater bypass valve. If the heater is bypassed, there may be a malfunction or a leak in the heat exchanger. If there is a readily accessible panel, remove it. If there is significant rust or if it appears that the heater has not been used for a while, recommend expert evaluation. Pool heaters can be expensive to replace.

Observe any skimmers. The skimmer lid should be intact. Many skimmers have a flap at the skimmer opening. This flap should be intact and functioning. Verify that the skimmer basket is installed and intact. Look for cracks in the skimmer housing. Verify that there is water flow in the skimmer.

Observe the water returns. If you can't see ripples on the pool surface from the water flow, reach in the water and feel the flow at a couple of returns, including the one furthest from the pump. Very low or no apparent water flow may indicate a problem requiring expert evaluation. Be careful and use good judgment when reporting water flows. The flow rates vary greatly among pools. They can also vary for any one pool based on valve settings and how accessories such as skimmers are being used.

Pool Interior

The most common in-ground pool interiors are plaster and vinyl over concrete. A plaster over concrete pool usually consists of a reinforced concrete shell covered with a plaster coating to make the pool waterproof. The plaster coating may be referred to by trade names like Marcite or Pebble Tec. A vinyl-lined pool generally consists of a metal shell covered with a vinyl lining. A plaster pool may last 10 to 20 years before resurfacing is required. A vinyl pool may last eight to 15 years before a new liner is needed. The quality of materials and installation, the quality of maintenance, the water chemistry, and factors such as exposure to sunlight will affect the useful life of a pool interior.

A cracked and displaced pool deck in need of repair

The deteriorated interior surface of a pool in need of resurfacing

Limited visual inspection of a pool interior is a matter of common sense. If the interior looks pitted, cracked, badly stained or otherwise deteriorated, the surface may be near the end of its useful life. Recommend expert evaluation. Pay close attention to cracks. These may be a source of expensive leaks. Expert evaluation may also be appropriate for stains that look like rust on the bottom of a plaster pool, particularly if they are numerous. Such stains may indicate problems such as improper water chemistry, improper curing of the plaster when it was installed, or rebar that is too close to the surface.

Observe any tile around the pool and the coping immediately above the tile. These should be intact with no gaps in the grout. The tile should be reasonably clean with no visible mineral deposits. Mineral deposits on pool tile may indicate improper water chemistry. Recommend expert evaluation.

The water should appear at the same level on the tile in all parts of the pool. If the water level is not uniform, and particularly if there are displacement cracks in the surrounding pool deck or coping, the pool may have "floated" out of the ground. This can be a serious problem. Strongly recommend expert evaluation.

Pool Deck

Most pool decks are made of concrete. Some concrete pool decks may be covered with a material, such as Kool Deck, to reduce the temperature of the deck surface. This covering will often appear as a mottled, colored surface on the deck. Other materials may be used as a pool deck or to cover one. Determine if the material is slippery when wet. If so, recommend expert evaluation.

Report cracks and deterioration in a concrete deck using the same standards as any non-structural concrete slab. ▸▸▸

While any cracks in a pool deck are unsightly, cracks exceeding 3/16 inch in either horizontal or vertical direction may require expert evaluation. Deterioration of deck covering material usually presents as visibly worn with discolored areas. Minor deterioration can usually be patched.

The deck should gently slope away from the pool in all directions to avoid allowing dirty water to flow into the pool. If the deck abuts the home, there should be a drain channel installed between the foundation and the deck. In most modern pools, these will be slotted plastic.

Slides and Diving Boards

Slides, diving boards and similar pool accessories are uncommon in newer pools because of liability and insurance concerns. They are more common in older pools. These components present significant potential liability for the inspector and the client. You should disclaim these components and recommend that the client remove them or at least check with his insurance agent about any insurance issues that may need to be addressed because of a slide and/or a diving board.

Neither yea nor nay. Rather, how

Swimming pools: To Inspect or Not to Inspect? That was the question. It's possible the answer for many inspectors is Yes, but...

Yes, but…

- Elect to do a limited inspection.
- Include a clear, written statement of what that means and review it with the client.
- Realize even a limited pool inspection takes time, and charging extra for this service may increase your liability.
- Know your limitations, including when to recommend expert evaluation.

By setting realistic client expectations and delivering on those expectations, home inspectors can provide a value-added service while minimizing their liability. ■

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He has been building and inspecting homes since 1987, and is licensed by the State of Arizona as a residential contractor; licensed by the State of Florida as a residential contractor; certified by the International Code Council as a Residential Combination Inspector; certified by the State of Arizona as a home inspector, and is an ASHI Member who serves on the Society's Technical Committee.

Prior to founding the firm, Barker was a manager for an international public accounting and consulting firm and a project manager in the data processing department of a life insurance company. Currently he is a member of the Independent Home Inspectors of North America and the International Code Council.