Identifying and Preventing Moisture Problems

Moisture and water that can damage historic homes come from three main sources: Rain, groundwater, and plumbing problems. All 3 sources can be identified and remedied; the key is to catch the signs early.

Rain. Keep an eye out for plaster flaking off of ceilings, brown or grey water stains, dampness in an attic, rotten soffit or fascia boards. Typically shingles have deteriorated past the point of repair, flashing was improperly installed or has been damaged, or gutters have become clogged and the resulting backup leads to water problems with the roof. Proper gutter maintenance is the number one method to prevent rainwater issues. If you see rain running over or behind gutters immediately inspect them for stoppage and to identify if they are fastened to the structure properly. If caught early on, rainwater issues can typically be dealt with by roof repair, basic fascia/ soffit repair, or painting ceilings. If left too long they can cause big headaches in the form of tearing out and replacing plaster ceilings, entire soffit/ fascia replacement, and rafter and framing damage. Also keep an eye out for upturned shingle tabs as debris can often be trapped under them, leading to potential leaks.

Groundwater. This can be the silent killer of homes, especially older homes. So many of the homes built in the Piedmont have dug out basements. These can quickly become ponds depending on the exterior grade. It is imperative that the grade slopes away from all sides of the house at 1" per foot. This should continue away from the structure as far as possible, however, 5'-6' would be a minimum. This helps keep rainwater from getting in through foundation walls. Basements and crawlspaces should be kept dry by means of laying down a 6-mil poly barrier. Do be careful when installing this vapor barrier for the first time to do it in shifts. Do not cover the entire surface below a house in 1 session. This quick drying can cause trim and moldings to shrink up too much inside the house and lead to cracks. Try to do the whole surface over a few weeks. You should keep the poly back from all exterior walls approximately 2' in order to allow some moisture to still escape and prevent water damage to the interior of soft masonry foundations. Dehumidifiers and sump pumps are more mechanical means of remedying moisture incursion. Downspouts and any connected hoses should be checked for function, and do make sure downspouts are not spilling water back close to the house. Stones, bricks, and black piping can all be used to route water away from the house.

Plumbing leaks. Often older homes are plumbed with a mixture of plumbing materials that have been cobbled together over the years. These can be copper, galvanized, or more modern plastic (or pex) piping. These combinations and the fittings that connect them can lead to many problems. When copper and galvanized are improperly connected it can cause electrolysis, and small pinholes will form in the copper line. These leaks can go undetected until it is too late. As with rain, stay vigilant for water stains on ceilings or water standing in basements and crawlspaces. Toilet flanges, improperly caulked tubs and showers, and failing grout in shower pans are leading contributors to water problems in homes. Small preventive maintenance throughout the year can pay big dividends over time.

Moisture problems and the ensuing damage from termites, ants, rot, and mold can be extremely damaging and costly to repair. The keep is to catch the signs early and stay on top of preventive maintenance.

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