CLEMSON EXTENSION

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RESIDENTIAL HOUSING

Landscape Management Checklist: Preventing Home Moisture Damage

Landscaping can beautify and enhance the value of a home. This requires careful planning of site and drainage, selection and placement of plants, and maintenance to complement the site and avoid moisture damage to the house. Use this checklist to help you prevent moisture damage to your home while beautifying your property.

OK	Needs Correcting		
❑	❑	1.	Does landscape plan include ditches, terraces, and/or subsurface drains to control storm water from adjacent yards, natural drainage channels, nearby hills, and large hard- surfaced driveways, patios, and parking areas? Careful planning is needed to keep water away from house and plantings.
❑	❑	2.	Is ground around house graded (and landscaping ground cover placed) to provide a downhill slope away from house in ALL directions? The CABO building code requires lots be graded to drain surface water away from foundation walls, with the grade away from foundation walls falling a minimum of 6 inches within the first 10 feet. (4% final grade.) If lot lines, walls, slopes or other physical barriers prohibit 6 inches of fall within 10 feet, drains or swales shall be provided to ensure drainage away from the structure. The proper slope directs rain water away from the house. Surface drainage must be diverted to a storm sewer or other collection point so as to not create a hazard--not onto others' property.
❑	❑	3.	Are roof gutters and downspouts connected to drain pipes that empty downhill away from the house? Splashblocks are not an acceptable method. Code miminum requires "...a controlled method of water disposal from roofs [gutters with downspouts and drainpipes] that will collect and discharge all roof drainage to the ground surface at least 5 feet from foundation walls or to an approved drainage system." A better recommendation is terminating a drainpipe at least 10 feet (preferably 20 feet) away from the house. This avoids dumping roof water near the house foundation where it may lead to damaged house structure and overwatering of shrubbery. (See Extension Circular 671 "Home Landscaping")
❑	❑	4.	Are exterior ground levels, including landscape ground covers, kept no higher than 8 inches below any untreated structural wood (sills, studs, joists) on the top or backside of a foundation wall, and no higher than 6 inches below any untreated wood house siding? These clearances help prevent soil and ground cover moisture from causing wood decay. Moisture easily migrates through wood, brick, concrete block, and other construction materials.

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❑	❑	5.	Is ground near the house foundation covered with gravel or other low ground cover? Rain or roof water splashing up from bare soil at the base of a wall contributes to wall decay and discolors wall surface. Caution: Organic mulch (such as bark, pine straw) may rovide a physical bridge across the chemical termiticide barrier immediately next to the house foundation. Keep any organic mulch or ground cover at least 12 inches away from the foundation. Alternate covers include pea gravel, crusher run, decorative stone or sand. Once the ground cover is in place, treat it with a termiticide. Any aggregate larger than pea gravel may serve as a cover for scorpions and other household structural pests
❑	❑	6.	If there are brick or concrete flower boxes or beds built around a house, are they separated from the house by several inches clearance, and designed so neither soil nor container touches house? This prevents soil or mulch moisture from decaying wood siding or structural members of the house.
❑	❑	7.	If shrubs and flowers are to be planted near the house as "foundation plantings," are plant varieties selected that—as mature plants—will not be so tall or wide as to block air circulation through foundation vents, or touch wood siding? Free air movement through vents is essential to help prevent wood decay in the crawl space. Free air movement around a house speeds drying of exterior house surfaces, helping prevent mildew and decay. (See Extension Circular 671 "Home Landscaping" for mature plant sizes and drainage requirements).
❑	❑	8.	Are plants to be used near the house of a variety that do not require a lot of watering? Frequent heavy watering near the house raises ground moisture levels and relative humidity levels of air, encouraging deterioration of building materials. (See Extension publication EC 672 "Xeriscaping")
❑	❑	9.	Are shrubs and flowers planted so that, when mature, the plant foliage is at least 5 feet away from house? This allows space for (a) home maintenance and painting, (b) pruning plants, (c) drying wall surfaces, (d) a summer cooling effect. In addition, it keeps away from wood trim or siding the moisture given off by plant transpiration.
❑	❑	10.	Are shrubs or flowers planted outside (beyond) the roof overhang? If planted where they receive rainfall, the need for additional watering is minimized. No watering should occur within 5 feet of a house foundation wall.
❑	❑	11.	Is watering or sprinkling done in such a way as to avoid wetting exterior house surfaces? Because of our climate, the state is in a high wood decay hazard zone. Sprinkling so as to wet house surfaces further increases the risk of mildew and damage.

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❑	❑	12. Are plantings with invasive root systems located far away from the house foundation, sidewalks, patios, driveways, and septic or sewer system? Place such plants where they cannot damage these areas.
❑	❑	13. When adding plants or changing landscaping, is it done so as to maintain positive drainage away from house, and avoid soil or plant contact with house? Planning can prevent future damage.
❑	❑	14. Are existing shrubs near a house pruned, as needed, to prevent wall contact and allow free air movement around house surfaces and through foundation vents? (See Extension Circular 671 "Home Landscaping" for pruning information).
❑	❑	15. Do you regularly maintain your landscape: prune shrubs; check to be sure soil and ground cover levels next to house are well below recommended clearances from wood siding or structural members; move plants that pose a hazard to house, sidewalk, or other structure? Regular inspections and maintenance can prevent damage.

SUMMARY

Proper planning of site and drainage, plant selection and placement, and maintenance are the keys to home landscapes that are attractive as well as prevent moisture damage to homes.

Prepared by Linda L. Redmann, Ph.D., Extension Residential Housing Specialist. Appreciation is extended to the Clemson University Department of Horticulture for assistance in the preparation of this leaflet, and to the following reviewers:
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