

Technical Bulletin

ATS-126 2013-01-16

GUIDELINES WHEN USING LAWN SPRINKLERS

Summary

Landscaping sprinkler systems near the perimeter of a building can cause unnecessary and unwanted deposition of minerals on walls and windows due to wetting and evaporation. Since these systems may be activated daily, the build-up of deposits may be significant.

Detail

Minerals, including iron and calcium, are present to some degree in all water supplies. Dried mineral deposits adhere quite well to smooth surfaces such as glass, and can be very difficult to remove. The mineral deposits themselves will not degrade glass, but they are unsightly and may build up over a period of time until there is a noticeable stained appearance. The glass is not actually stained or etched; it simply has a deposit on the surface. Glasses with a coating on the exterior #1 surface, such as Pilkington **Activ**™ Self-Cleaning Glass or Pilkington **OptiView**™ Anti-Reflective Glass, can show such dried deposits very readily.

If mineral deposits build to an extent where they can be damp and hold water against the glass for lengthy periods, then glass staining or etching could be expected. See ATS Bulletin #112.

Problems may occur when a window washer uses an abrasive or strong acid cleaner to remove deposits. On glass surfaces this can often be carefully done with some success, but repeated action will ultimately damage the glass. Removing these deposits is even more difficult from first surface coated glass.

Architects, landscapers, and building owners should be advised that it is good design practice to eliminate or minimize overspray on all building surfaces, particularly glass. There are alternative irrigation systems such as drip irrigation, underground irrigation, and limited pattern spray heads. These alternatives should be considered near the perimeter of a building.

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Good design includes a 'drip' detail at the head of a window frame to divert water running down from upper areas, away from the glass surface and so minimize dirt accumulation on glass.

If deposits do occur, remember the basic guide: Glass, and especially #1 surface coated glass, should never be allowed to become dirtier than is visibly acceptable. They should be cleaned as frequently as is necessary to prevent them from ever appearing unacceptably dirty. In this way problems with the accumulation and hardening of dirt deposits can be prevented.

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