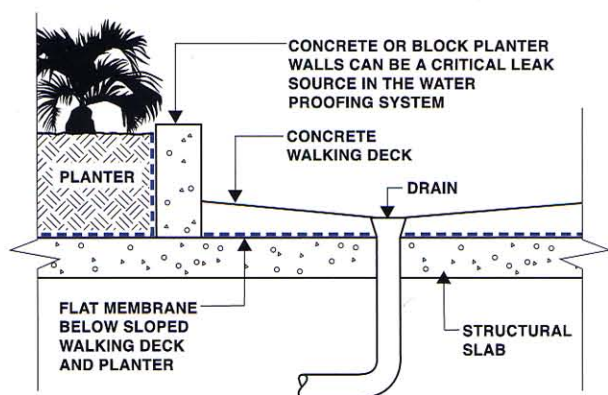




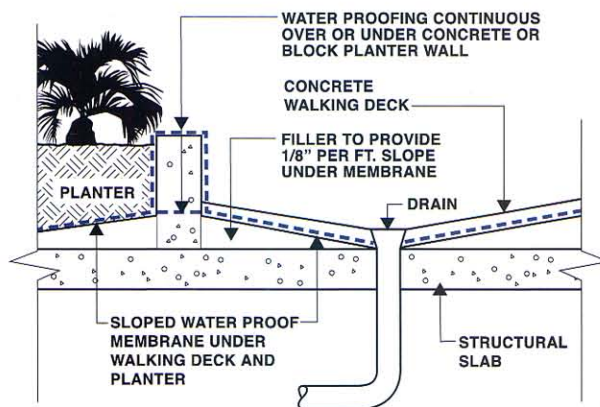
BUILDING ANALYSTS



DECK PLANTERS ABOVE MULTI-LEVEL GARAGE



NOT RECOMMENDED



RECOMMENDED

COMMON PROBLEMS

- Leaks into the parking garage causing damage to car finishes.
- Ponding water into the garage floor causing slip and fall hazards.
- Lack of continuity of the waterproof membrane at the intersection of the horizontal to vertical surfaces.
- Planter floors and walls are frequently the source of leaks into multi-level garage.
- Planter waterproofing damaged by root penetration into the membrane.
- Poor selection of plant material, which overwhelms the planter size when plants are fully mature.
- Thin fluid applied membranes are prone to failure through lack of adhesion and tears in the membrane.
- Unsealed penetrations such as electrical and mechanical through the waterproofing membrane.

Building Analysts' newsletter is intended to provide general information for those involved in construction litigation. The topics contained in this publication are abbreviated and applicability to a particular situation may vary according to circumstances. Since design and construction technologies change over time, the information contained herein may become outdated. Building Analysts recommends you contact the appropriate design professional for specific information regarding individual projects.

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SOLUTIONS

- The waterproof membrane must be continuous and sloped to drain 1/8" per foot minimum under walking slab and in planters.
- Adhere to the manufacturer's recommendations for installation of the waterproof membrane.
- Provide continuous inspection of the waterproof installation and water test the system.
- Provide protection over the waterproof membrane from foot traffic during construction, as well as subsurface drain at the low point of the sloped membrane.
- If masonry is used in the planters, parge the surface before applying the waterproof membrane.
- Use root barrier in all planters to at least minimize the root damage to the waterproof membrane.
- Beware of "value engineering" the waterproof membrane system. Repairs can prove to be 10 times the original cost of installation if the system fails.

Building Analysts is a full-service architectural firm, specializing in construction analysis and litigation support, quality assurance, and peer review services. If you need our expert advice or recommendations, please contact us at analysts@buildinganalysts.com, or visit our web site for further information.