

Foundations

Foundation construction in the District evolved as technology advanced. Until the late eighteenth century most foundations were constructed of fieldstones. By the last decade of the eighteenth century and into the twentieth century foundations were constructed of granite slabs that were quarried locally. Brick was occasionally used, either as interior insulation or an exterior facing material. The majority of contemporary houses in the District have foundations of poured concrete or cement block.

Granite foundations are of slab or block construction, with interior pier walls, and occasionally incorporate decorative corner blocks and water tables. Water tables, or water table boards, are decorative features that divert rainwater away from the surface of a building, and most in the District are constructed of wood. Raised foundations often incorporate basement windows, wells, or grilles to allow light into the basement or crawlspace, and to provide ventilation.



Decorative corner block and window well



Granite foundation and water table

Recommendations

- Historic foundation materials should be retained and repaired as necessary. If repair or replacement is necessary materials should be replaced in-kind, respecting the size, texture, color and pattern of the original as closely as possible.
- Vines and plantings should be kept away from foundation walls. All plant materials retain moisture, and the roots and stems can cause damage to masonry joints.
- The ground should slope *away* from the foundation so that water does not drain toward the structure and erode the foundation. Monitor site drainage periodically to insure that water is adequately directed away from the foundation. If drainage problems are causing water to drain towards the foundation, the slope should be regraded.
- Basement window openings should not be filled in permanently with brick, stone, or concrete block. If an opening must be covered wood panels fastened to the window framing are recommended, or the window glass may be replaced with a wooden or metal panel painted to blend in with the foundation color. Adequate ventilation should be provided if windows are covered. Use of a louvered vent in a wooden window covering is recommended.
- Grilles should be kept clear of obstructions. If the opening is covered, the grille should remain intact.
- Do not apply a waterproof or impervious coating (i.e. stucco) to the foundation. In addition to altering the historic appearance of the building, waterproof materials can trap moisture and accelerate deterioration of the foundation and sills.
- Foundations that are painted should be approached with caution. Removal of paint from foundations may lead to serious deterioration if the foundation material is porous. Do not paint foundations that have not been painted in the past.
- Cleaning a foundation is not recommended unless absolutely necessary. Although a variety of cleaning and waterproofing options are available, many of these products are

inappropriate for use on historic foundations. Sandblasting, powerful chemical cleaners, or mechanical cleaning are not recommended since each can result in irreparable damage to the foundation. Wire brushing by hand is recommended as a safe method of cleaning a foundation.

- If it is necessary to repoint masonry, mortar joint size and profile should match the original as closely as possible. The mortar should match the original in strength, color, texture, and hardness (density and porosity). In general, mortar should be slightly weaker than the masonry unit. Laboratory analysis of samples of original mortar is recommended to insure that a compatible formula is used in repointing and repair. Use of premixed mortar products is not recommended. Premixed mortars are harder than historic mortars and will result in damage to the masonry.