

WATER PROOFING GUIDELINES

FOLLOW CURRENT CODES
AS ADOPTED BY THE STATE
OF OHIO



Building Department

7595 Walton Road
Walton Hills, Ohio 44146

FOR INSPECTIONS OR GENERAL
INFORMATION PLEASE CALL:

Phone: 440-786-2970

Fax: 440-232-4070

WWW.WALTONHILLSOHIO.GOV

1. SECTION R405, FOUNDATION DRAINAGE

R405.1 Concrete or masonry foundations. Drains **shall be provided** around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing **and be covered with an approved filter membrane material**. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe **shall be** placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock at least one sieve size not less than 6 inches (152 mm) of the same material. **Exception:** A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1. **PROVIDE RESULTS FROM TESTING AGENCY.**

2. SECTION R406, FOUNDATION WATERPROOFING AND DAMPPROOFING

R406.1 Concrete and masonry foundation dampproofing. Except where required by Section R406.2 to be waterproofed, foundation walls that retain earth and enclose interior spaces and floors below grade **shall be** dampproofed from the top of the footing to the finished grade. Masonry walls shall have not less than 3/8 inch (9.5 mm) portland cement parging applied to the exterior of the wall. The parging shall be dampproofed in accordance with one of the following:

1. Bituminous coating.
2. 3 pounds per square yard (1.63 kg/m²) of acrylic modified cement.
3. 1/8-inch (3.2 mm) coat of surface-bonding cement complying with ASTM C 887.
4. Any material permitted for waterproofing in Section R406.2.
5. Other approved methods or materials. Prior approval is required from the Building Department as to materials used.

Exception: Parging of unit masonry walls is not required where a material is approved for direct application to the masonry. Concrete walls shall be dampproofed by applying any one of the above listed dampproofing materials or any one of the waterproofing materials listed in Section R406.2 to the exterior of the wall.

R406.2 Concrete and masonry foundation waterproofing. In areas where a high water table or other severe soil-water conditions are known to exist, exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be waterproofed from the top of the footing to the finished grade. Walls shall be waterproofed in accordance with one of the following:

1. 2-ply hot-mopped felts.
2. 55 pound (25 kg) roll roofing.
3. 6-mil (0.15 mm) polyvinyl chloride.
4. 6-mil (0.15 mm) polyethylene.
5. 40-mil (1 mm) polymer-modified asphalt.
6. Design by professional.

3. INSPECTIONS REQUIRED:

First Inspection. **A.** Parging is 100% complete. **B.** The foundation wall is 100% sealed for dampproofing with a bituminous coating. For waterproofing in areas with a high water table, the membrane covering shall be installed, lapped a minimum of 6 inches and sealed. **C.** Minimum of 2 inches of gravel base installed below the drainage tile or perforated piping. **D.** Drainage piping is 100% installed, **piping has the approved filter membrane completely around the drainage piping**, this piping will be inspected at this time. Contact the Building Department at 440-786-2957 for inspection.

Second Inspection. **if the filter membrane is not used around drainage piping, a minimum of 6 inches of gravel shall be installed above the drainage piping and the approved filter membrane shall be completely in place on top of the gravel.** If the filter membrane was installed around the piping and passed the first inspection, call for the second inspection when gravel is backfilled and topsoil is on site but not backfilled. **Final Inspection.** When completely backfilled with topsoil and the entire area is properly graded, seeded with lawn seeds and/or original flower bed or shrubs are re-planted and all downspouts are connected.

IF ANY OF THE ABOVE IS NOT COMPLETE AT TIME OF INSPECTION, A RE-INSPECTION FEE MAY APPLY