

# 2021 Virginia Construction Code

## CHAPTER 19 CONCRETE

### SECTION 1904 DURABILITY REQUIREMENTS

#### 1904.1 Structural concrete.

Structural concrete shall conform to the durability requirements of [ACI 318](#).

**Exception:** For Group R-2 and R-3 occupancies not more than three stories above grade plane, the specified compressive strength,  $f'_c$ , for concrete in basement walls, foundation walls, exterior walls and other vertical surfaces exposed to the weather shall be not less than 3,000 psi (20.7 MPa).

#### 1904.2 Nonstructural concrete.

The registered design professional shall assign nonstructural concrete a freeze-thaw exposure class, as defined in [ACI 318](#), based on the anticipated exposure of nonstructural concrete. Nonstructural concrete shall have a minimum specified compressive strength,  $f'_c$ , of 2,500 psi (17.2 MPa) for Class F0; 3,000 psi (20.7 MPa) for Class F1; and 3,500 psi (24.1 MPa) for Classes F2 and F3. Nonstructural concrete shall be air entrained in accordance with [ACI 318](#).