

CODE

COMMENTARY

20.5.1.2 It shall be permitted to consider concrete floor finishes as part of required cover for nonstructural purposes.

The condition “exposed to weather or in contact with ground” refers to direct exposure to moisture changes and not just to temperature changes. Slab soffits are not usually considered directly exposed unless subject to alternate wetting and drying, including that due to condensation conditions or direct leakage from exposed top surface, run off, or similar effects.

Alternative methods of protecting the reinforcement from weather may be provided if they are equivalent to the additional concrete cover required by the Code. When approved by the building official under the provisions of **1.10**, reinforcement with alternative protection from weather may not have concrete cover less than the cover required for reinforcement not exposed to weather.

Development length provisions given in **Chapter 25** are a function of cover over the reinforcement. To meet requirements for development length, it may be necessary to use cover greater than the minimums specified in 20.5.1.

R20.5.1.2 Concrete floor finishes may be considered for nonstructural purposes such as cover for reinforcement and fire protection. Provisions should be made, however, to ensure that the concrete finish will not spall off, thus resulting in decreased cover. Furthermore, considerations for development of reinforcement require minimum monolithic concrete cover in accordance with 20.5.1.3.

20.5.1.3 Specified concrete cover requirements

20.5.1.3.1 Nonprestressed cast-in-place concrete members shall have specified concrete cover for reinforcement at least that given in Table 20.5.1.3.1.

R20.5.1.3 Specified concrete cover requirements

Table 20.5.1.3.1—Specified concrete cover for cast-in-place nonprestressed concrete members

Concrete exposure	Member	Reinforcement	Specified cover, mm
Cast against and permanently in contact with ground	All	All	75
Exposed to weather or in contact with ground	All	No. 19 through No. 57 bars	50
		No. 16 bar, MW200 or MD200 wire, and smaller	40
Not exposed to weather or in contact with ground	Slabs, joists, and walls	No. 43 and No. 57 bars	40
		No. 36 bar and smaller	20
	Beams, columns, pedestals, and tension ties	Primary reinforcement, stirrups, ties, spirals, and hoops	40