

CITY OF JERSEY CITY

OFFICE OF THE CONSTRUCTION CODE OFFICIAL

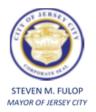


1 JACKSON SQUARE, 2nd FLOOR JERSEY CITY, NJ 07305 P: 201 547 5055

Visual inspection is the process of concrete surface examination to specify and illustrate various concrete conditions concrete might demonstrate during its life span. It helps to determine concrete deterioration at early stages which facilitates repair of concrete member before replacement is required.

Table: Checklist for Visual Inspection of Concrete Structure

Inspection Items	Description
Description of structure	 Name, location, type, and size Owner, project engineer, contractor, date of construction Photographs involve general view and a detailed close-up of the condition of an area Draw map-orientation showing the sunny and shady areas and the well and poorly drained regions.
Nature of environmental and loading conditions	Exposure of the structure to various environmental and loading conditions: Arid, subtropical, marine, freshwater, industrial environment. Freezing and thawing, wetting and drying under a dry atmosphere. Chemical corrosion and attack: sulfates, acids, bases, chloride, gases Abrasion, erosion, cavitation, impact Electrical conductivity Deicing chemicals that contain chloride ions Heat from adjacent sources
Drainage	☐ Flashing Joint, sealants, Weep holes, Contour Elevation of drains
Loading conditions	 □ Dead □ Live □ Impact □ Vibration □ Traffic □ Seismic □ Other types of loads



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	☐ Expansive soil
Soils (foundation conditions)	☐ Compressible soil (settlement)
	☐ Evidence of pumping
	□ Cracking
5.1	□ Staining
Distress indicators	☐ Surface deposits and exudations
	☐ Leaking
Overall apparent alignment of structure	☐ Settlement
	□ Deflection
	☐ Expansion and contraction.
General Condition of Concrete Surface	\Box Good
	□ Satisfactory
	☐ Poor
	□ Smoothness
	☐ Bug-holes (surface air voids)
Formed and finished concrete	☐ Sand streaks
surfaces	☐ Honeycomb
	☐ Soft areas
	☐ Cold joints
	☐ Staining
	☐ Location and frequency of cracks
Cracking	☐ Crack map
<u> </u>	☐ Crack width and pattern
	☐ Leaching
Scaling of concrete	☐ Type
	☐ Area
	☐ Depth
	□ Number
Spalls and pop-outs	□ Size
	□ Depth
a	☐ Type
Stains, efflorescence	
Exposed reinforcement	☐ Corrosion
Curling and warping	<u> </u> -
Erosion	☐ Abrasion, Cavitation



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Previous patching or other repair	-
Surface coatings/protective systems/linings/ toppings	 □ Type and thickness □ Bond to concrete □ Condition
Penetrating sealers	☐ Type☐ Effectiveness☐ Discoloration