SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	CONCRETE GENERAL NOTES	3-1-68

REVISIONS

1-22-69

12- 1-70

STRUCTURAL CONCRETE GENERAL NOTES

1. All structural concrete shall conform to "ACI Standard Building Code Requirements for Reinforced Concrete" (ACI 318-63), except where specifically modified, supplemented or superseded by the Specifications or specific notes in the Drawings.

2. Refer to Architectural Drawings for openings, architectural treatments and dimensions not shown. Refer to Mechanical, Electrical and Architectural Drawings for size and location of all ducts, piping, conduits, reglets, inserts, etc.

3. Structural steel and floor panels are imprinted on the concrete drawings for orientation only. For actual dimensions and other data, refer to the applicable Drawings.

4. Mixing and placing of all concrete and selection of material shall conform to the Specifications. Refer to the Specifications for concrete mix design requirements.

5. Stone concrete (Normal weight concrete) or lightweight concrete (Lightweight structural concrete) to be used in each floor is indicated in Drawings or in the table below, or both.

Sub level 5 & 4	f'c 3000 psi stone concrete
Sub level 3	f'c 4000 psi stone concrete
Sub level 2 & 1	f'c 4000 psi stone concrete
Service level & Floor 1	f'c 3000 psi stone concrete
Intermediate level	f'c 3000 psi stone concrete
Floor 2	f'c 3000 psi lightweight concrete
Floor 3 thru 6 inclusive	f'c 3000 psi stone concrete
Floor 7	f'c 4000 psi stone concrete
Floor 8 & 9	f'c 3000 psi stone concrete
Floor 10 thru 40 incl.	f'c 3000 psi lightweight concrete
Floor 41, 42 & 43	f'c 3000 psi stone concrete
Floor 44 thru 74 incl.	f'c 3000 psi lightweight concrete
Floor 75, 76 & 77	f'c 3000 psi stone concrete
Floor 78 thru 106 incl.	f'c 3000 psi lightweight concrete
Floor 107	f'c 4000 psi stone concrete
Floor 108 thru PH Roof incl.	f'c 3000 psi stone concrete

6. The ultimate strength mehtod has been used in design of the concrete work shown in the Drawings.

7. The slab thicknesses and finish elevations of concrete immediately after placement shall conform to screeding diagrams supplied by the Engineer. See Specifications.

8. Concrete which will bond with previously placed concrete at a construction joint shall not be placed until the existing concrete at the construction joint has been cured a minimum of 40 hours.

PRECAST CONCRETE

1. Refer to Architectural Drawings for openings, details and dimensions not shown.

2. Strength (f'c) shall conform to the strength shown in the Drawings. Where no strength is shown in the Drawings, f'c shall be 3000 psi, except that facing concrete, where called for, shall be f'c = 5000 psi.

3. Contractor shall submit design mixes for approval by the Engineer. Reinforcing steel has not been provided to resist stripping, handling or erection stresses. Where required, Contractor shall provide reinforcing steel, stiffeners, bracing, etc. to resist erection stresses. Lifting inserts, etc. have not been shown. Where required, inserts shall be installed in locations where they will be covered by the construction.

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DESIGNED

DRAWN S.A.

REVIEWED

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