

Chorka Apparels Ltd. (Extension)

Danga Industrial Park, Kazirchor, Danga, Palash, 1610, Narsingdi

(23.897427, 90.572340)

25 January 2024



1. Building Information

1. Utility Building: The structure is a two storied (G+1) reinforced concrete (RC) building.
2. CS Building: This is a four storied (G+3) reinforced concrete RC Building.
3. Wastage & Chemical Shed: Single storied steel shed.

2. Observations

Observation-1: Absence of design report (Utility Building)



Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, design report was available which is required to be prepared in compliance with section 1.9.1.1 (part 6, BNBC).

Observation-2: Inadequate number of concrete cylinder test report (CS Building)

TECHNICAL NOTES:

1. CONSIDERING ALLOWABLE BEARING CAPACITY OF SOIL = 2.5 KSF AT DEPTH 7'-0" FROM EXI: PER SOIL TEST REPORT.
2. CYLINDER CRUSHING STRENGTH AT 28 DAYS $f'_c = 3500$ PSI.
3. NORMAL CONCRETE MIX PROPORTION = 1: 1.5: 3 (CEMENT: SAND: STONE CHIPS)
4. AGGREGATE:
 - A. COARSE AGGREGATES: $\frac{3}{4}$ " DOWN WELL GRADED BEST QUALITY WASHED STONE CHIPS.
 - B. FINE AGGREGATES: WASHED SYLHET SAND (F.M = 2.5) 100%
5. YIELD STRENGTH OF M.S. DEFORMED BAR: $f_y = 60,000$ PSI
6. SHUTTER OPENING: (MINIMUM TIME)
 - A. COLUMN-48 HOURS FROM CASTING TIME
 - B. BEAM SIDE 72 HOURS
 - C. BEAM/SLAB -21 DAYS (BOTTOM) UP TO 20'-0" SPAN & FOR ABOVE 28 DAYS
7. MINIMUM CURING TIME:
 - A. COLUMN - 21 DAYS
 - B. ROOF/BEAM - 21 DAYS
 - C. BRICK WORK, PLASTER 10 DAYS
8. BRICKS TO BE SOAKED IN WATER AT LEAST FOR 24 HOURS BEFORE USE.
9. PROVIDE MORTAR BLOCK CEMENT : SAND (1:1)
10. MAINTAIN MINIMUM 3" CLEAR COVER
11. PROVIDE CHAIR OF $\frac{3}{8}$ " ϕ BARS AT 2'-0" SQUARE PANEL TO KEEP THE TOP BARS IN EXACT PO
12. 90° HOOK MUST BE PROVIDED WHERE THE SLAB AND BEAMS ARE TO BE ENDED.
13. ALL KIND OF SAND TO BE SCREEN & WASHED BEFORE USE.

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)
 DEPARTMENT OF CIVIL ENGINEERING
 86-AH, JOYDEBPOUR, DHAKA-1209
 CONCRETE LABORATORY

B/C No. 1104-4107 01-0305; 01-0110021
 Ref. No. 1. Property Development Ltd (PCL)
 2. G-1201 Service Building, Dhaka-1212
 3. Location: 01-0110021
 Ref. No. 01-0110021
 Project: 01-0110021 (01-0110021)
 Sample: Concrete Cylinder
 Location: 01-0110021
 Test: Compressive Strength of Concrete (ASTM C39)

Date of Test: 01/01/2021

Sl. No.	Date of Casting and Age	Specimen Designation	Specimen Size (mm)	Maximum Load (kN)	Crushing Strength (MPa)	Crushing Strength (PSI)	Remarks
1	30/01/2021	01-0110021	150 x 300	3,500	24.13	3500	Good
2	01/01/2021	01-0110021	150 x 300	3,500	24.13	3500	Good
3	01/01/2021	01-0110021	150 x 300	3,500	24.13	3500	Good

Note: Specimens were tested in accordance with ASTM C39.

Checked by: *[Signature]*
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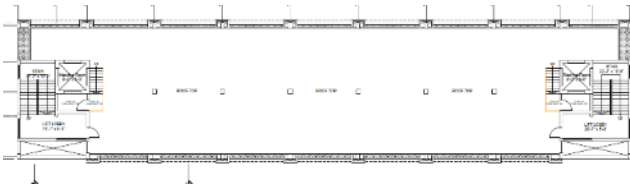
Description: Design concrete compressive strength (f'_c) is considered as 3500 psi (24.13 MPa). Adequate number of concrete cylinder test reports were not available onsite as per BNBC. The building engineer is required to take adequate number of concrete core sample to justify the design strength.

Observation-3: Absence of design report (CS Building)



Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, design report was available which is required to be prepared in compliance with section 1.9.1.1 (part 6, BNBC).

Observation-4: Lack of information in architectural drawing (CS Building)



Description: Internet tower on the roof was not shown in architectural drawing. The building engineer is required to produce accurate as-built drawing.

Observation-5: Absence of design report (Wastage & Chemical Shed)



Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, design report was available which is required to be prepared in compliance with section 1.9.1.1 (part 6, BNBC).

Observation-6: Corrosion on steel members (Wastage & Chemical Shed)



Description: Corrosion was found on steel members at several locations. The building engineer is required to provide rust proof on steel members to protect from corrosion.

3. Action Plan

Observation	Action Plan	Timeline
Utility Building		
Absence of design report (Utility Building)	The building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part 6, BNBC).	within 6 weeks
Absence of design report (Utility Building)	Carry out suggested remedial works if required.	within 6 months
CS Building		
Inadequate number of concrete cylinder test report (CS Building)	The building engineer is required to take adequate number of concrete core sample to justify the design strength.	within 6 weeks
Absence of design report (CS Building)	The building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part 6, BNBC).	within 6 weeks
Absence of design report (CS Building)	Carry out remedial works if required.	within 6 months
Lack of information in architectural drawing (CS Building)	The building engineer is required to produce accurate as-built drawing.	within 6 weeks
Wastage & Chemical Shed		
Absence of design report (Wastage & Chemical Shed)	The building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part 6, BNBC).	within 6 weeks
Absence of design report (Wastage & Chemical Shed)	Carry out remedial works if required.	within 6 months
Corrosion on steel members (Wastage & Chemical Shed)	The building engineer is required to provide rust proof on steel members to protect from corrosion.	within 6 weeks