

Vision Garments Ltd (Extension-2)

B-47, Purbo Razashan, Savar, Dhaka

(23.849137, 90.286952)

10 April 2025



1. Building Information

1. ETP BUILDING: This is a 6 storied (B+G+5) reinforced concrete building with underground ETP operation.
2. Connecting Bridge: Single-storied steel structure.

2. Observation:

Observation-01: Inadequate number of concrete cylinder test report (ETP Building).

3. CONCRETE :

a) **TYPE :** ALL CONCRETE COMPRESSIVE STRENGTH CONSIDERED AS FOLLOWS :

1) f_c = MINIMUM 4500 PSI

b) MINIMUM CYLINDER STRENGTH BASED ON CYLINDER TEST OF
DIAMETER $D = 150\text{mm}$ & HEIGHT = 300mm

i) 28 DAYS STRENGTH = AS SPECIFIED IN 3(a)

ii) 7 DAYS STRENGTH = 75% OF THE 28 DAYS STRENGTH.

c) **CURING OF R.C.C WORK :**

i) CURING TIME MINIMUM 28 DAYS

ii) METHOD OF CURING :

TEST REPORT

No. No.	Date of Casting as per the label	Specimen Designation	Specimen Area (mm ²)	Maximum Load (kN)	Compressive Strength (MPa)	Average Compressive Strength (MPa)	Mode of Failure
1	13/03/2022	---	13.87	60.736	4.384	4780 psi	Compressed
2	08 April 2022	---	13.87	60.736	4.384	5011 psi	Compressed
3	---	---	13.87	60.736	4.384	(311 kg/cm ²)	Compressed

Note: Samples were received in sealed condition.

Checked/signed by: *[Signature]*
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Test performed by: *[Signature]*
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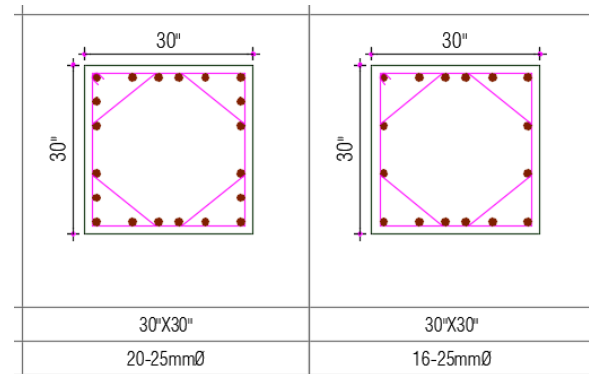
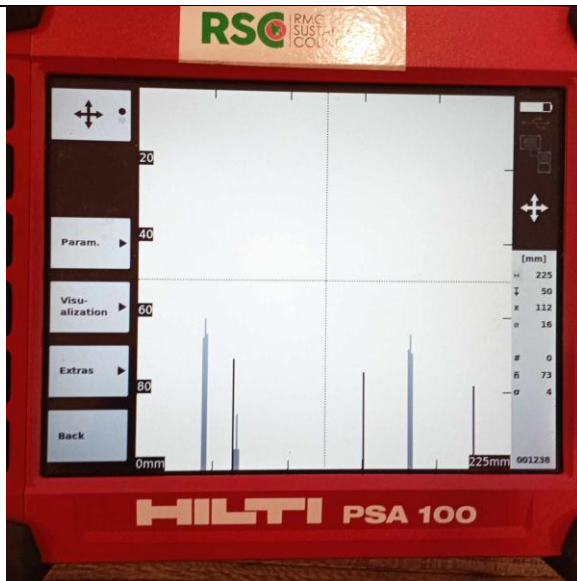
Description: The design strength of concrete is 31 MPa (4500 psi). The building is 6 storied with a basement but at the time of inspection only 3 concrete cylinder test report from column were available; first floor (1) and second floor (2) which doesn't meet the frequency of testing as per BNBC. Also, no test report (column) was available from other floors. The building engineer is required to take adequate numbers of concrete core (minimum 4) from column & floor each to confirm the design concrete strength.

Observation-02: Lack of design report (ETP 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. At the time of inspection, the design report was not available, which must be prepared in compliance with section 1.9.1 (part-6, BNBC) based on in-situ concrete strength.

Observation-03: Discrepancy in as-built drawing. (ETP Building).



Description: Number of rebar was found 3X3 on 4th floor instead of 6X6 during ferro scanning in column C3. The building engineer is required to survey the whole structure and prepare accurate as-built drawing with evidence.

Observation-04: Crack on brick wall (1st floor) (ETP Building).



Description: Crack was found on brick wall (1st floor). The building engineer is required to identify the reason and repair the crack with a suitable method.

3. Action Plan

Item No	Observation	Action Plan	Timeline
1.	Inadequate number of concrete cylinder test report (ETP Building).	The building engineer is required to verify in-situ material strength by taking minimum four concrete cores from existing building column & floor each.	within 6 weeks
2.	Lack of design report (ETP Building).	The building engineer is required to prepare a design report in compliance with section 1.9.1 (part-6, BNBC) based on in-situ concrete strength.	within 6 weeks
3.		Implement remediation work after acceptance from RSC.	within 6 months
4.	Discrepancy in as-built drawing. (ETP Building).	The building engineer is required to survey the whole structure and prepare accurate as-built drawing with evidence.	within 6 weeks
5.	Crack on brick wall (1st floor) (ETP Building).	The building engineer is required to identify the reason and repair the crack with a suitable method.	within 6 weeks