

Santic (Bangladesh) Co. Ltd.

Aukpara, Ashulia, Savar, Dhaka.1341

(23.886859, 90.297215)

27 February 2025

Structural Inspection Report

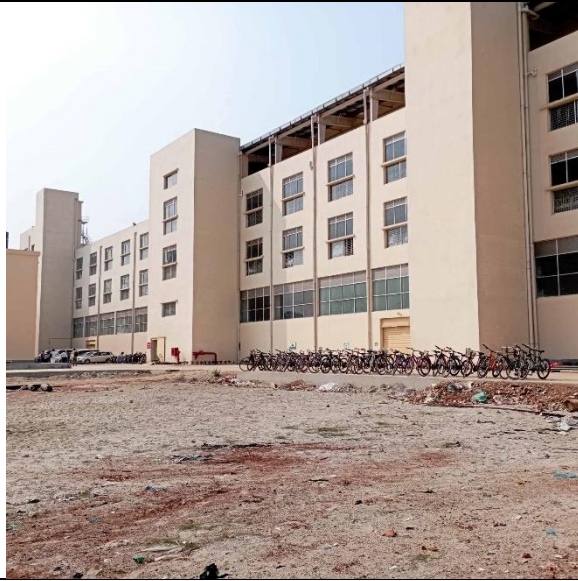


1. Building Information

1. Main Building.
2. Dining Building.
3. Utility Building.
4. Pump Room.

2. Observation

Observation 1: Lack of design report. (Main Building).



Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provisions 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 the inspection, the design report was not available. Besides, 7 set MS plate test reports were available (5 mm, 6mm, 8mm, 10mm, 12mm, 16mm, 20mm); for 5,6 & 8 mm achieved 450 MPa, 10mm =282 MPa, 12mm=441 MPa, 16mm= 401MPa, 20mm=373 MPa achieved.

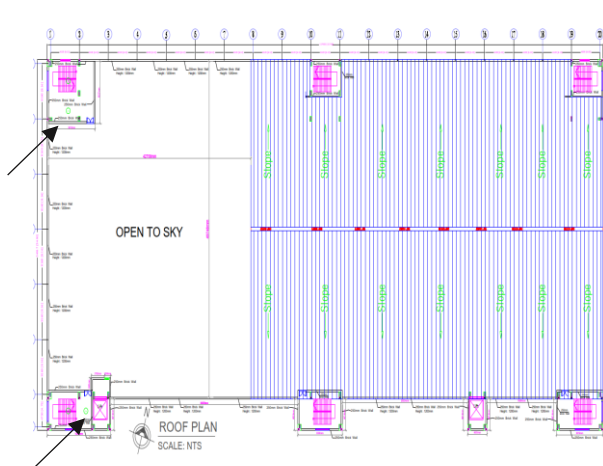
The building engineer is required to prepare a set of design reports based on steel strength in compliance with section 1.9.1 (part-6, BNBC). Also, confirm the design strength of steel.

Observation 2: Incomplete lateral stability system of roof shed (Main Building).



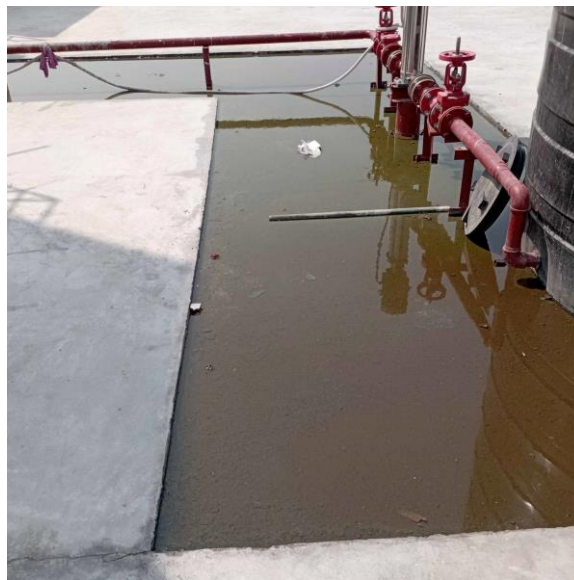
Description: Load transfer media is provided; horizontal bracing is provided on the east side but not on the west side. No vertical bracing is provided to resist the lateral load for the shed part. The building engineer is required to check the lateral stability of the roof shed.

Observation-3: Discrepancy in provided drawing (Main Building).



Description: 5 plastic tanks were found (capacity 7500 liters each), but only two tanks were shown in the drawing. The building engineer is required to update the as-built drawing.

Observation-4: Water ponding on roof Slab (Main Building).



Description: Water ponding on roof slab due to poor drainage system. The building engineer is required to improve the drainage system on the roof slab.

Observation 5: Non-structural elements were found not anchored/braced. (Main Building).



Description: Storage rack/plastic tanks were found without being braced/anchored. The building engineer is required to brace/anchor all non-structural elements.

Observation 6: Lack of design report and test report (Dining Building).



Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provisions 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 the inspection, the design report was not available. Also, no concrete cylinder test report was available. The building engineer is required to prepare a set of design reports based on in situ concrete strength in compliance with section 1.9.1 (part-6, BNBC).

Observation-7: Water ponding on roof Slab (Dining Building).



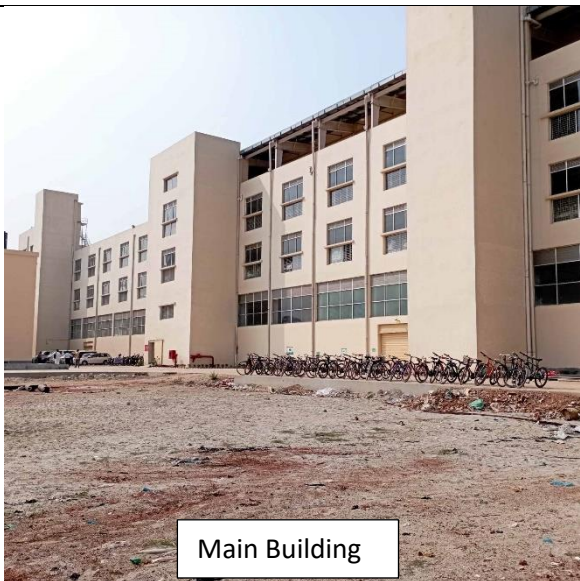
Description: Water ponding on roof slab due to poor drainage system. The building engineer is required to improve the drainage system on the roof slab.

Observation 8: Lack of design report (Utility Building).

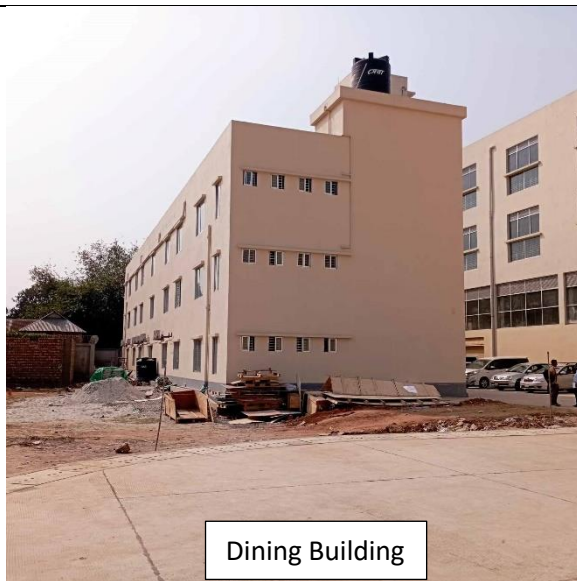


Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provisions of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of the inspection, the design report was not available.
The building engineer is required to prepare a set of design reports in compliance with section 1.9.1 (part-6, BNBC).

Observation 9: Lack of approval layout/drawing from local authority. (All structures).



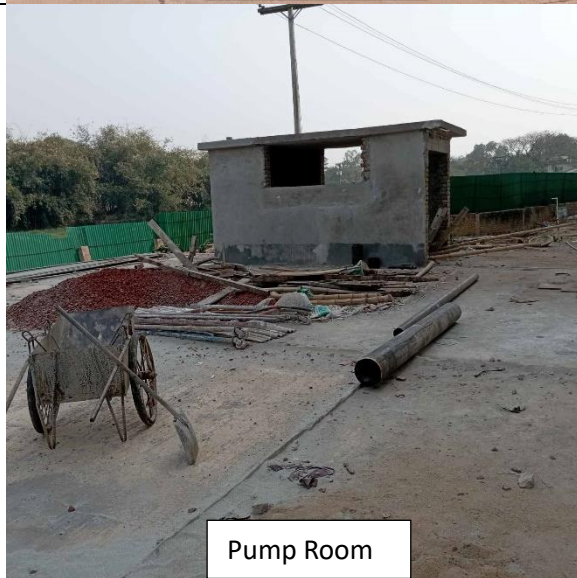
Main Building



Dining Building



Utility Building



Pump Room

Description: No approval layout/drawing was available from the local authority for any of the structures. The factory is required to collect approval layout/drawing from the relevant local authority for all structures within the factory.

3. Action Plan

Item No.	Observation	Action Plan	Timeline
1.	Lack of design report. (Main Building).	The building engineer is required to prepare a design report as per 1.9.1-BNBC and submit it to RSC for review.	within 6 weeks
2.		Also, confirm the design strength of steel.	within 6 weeks
3.		Implement remediation work if required.	within 6 months
4.	Incomplete lateral stability system of roof shed (Main Building).	The building engineer is required to check the lateral stability of the roof shed.	within 6 weeks
5.	Discrepancy in as-built drawing (Main Building).	The building engineer is required to update the as-built drawing.	within 6 weeks
6.	Water ponding on roof Slab (Main Building).	The building engineer is required to improve the drainage system on the roof slab.	within 6 weeks
7.	Non-structural elements were found not anchored/braced. (Main Building).	The building engineer is required to brace/anchor all non-structural elements.	within 6 months
8.	Lack of design report and test report (Dining Building).	The building engineer is required to prepare a design report as per 1.9.1-BNBC and submit it to RSC for review.	within 6 weeks
9.		Take a minimum of 4 (100 mm diameter) concrete cylinder cores from the column (lower level).	within 6 weeks
10.		Implement remediation work if required.	within 6 months
11.	Water ponding on roof Slab (Dining Building).	The building engineer is required to improve the drainage system on the roof slab.	within 6 weeks

12.	Lack of design report (Utility Building).	The building engineer is required to prepare a design report as per 1.9.1-BNBC and submit it to RSC for review.	within 6 weeks
13.		Implement remediation work if required.	within 6 months
14.	Lack of approval layout/drawing from local authority. (All structures).	The factory is required to collect approval layout/drawing from the relevant local authority for all structures within the factory.	within 6 months

Survey Limitations and Assumptions

This report is for the private and confidential use of RSC for whom it was prepared together with their professional advisors as appropriate. It should not be reproduced in whole or in part or relied upon by third parties for any use without the express written permission of RSC.

This report can be used in discussion with the supplier or factory owner as a means to rectify or address any observations made. The report is not comprehensive and is limited to what could be observed during a visual inspection of the building.

This Report is not intended to be treated as a generalized inspection and does not cover the deterioration of structural members through dampness, fungal or insect attack, nor does it deal with problems and defects of a non-structural nature. Other non-structural aspects of the building such as fire safety have not been assessed in this survey.

Except as otherwise noted, drains and other services were not viewed or tested during our inspection and are therefore similarly excluded from this Report. We have not inspected any parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from defect.

External inspection of the façade walls has generally been carried out from ground level only by visual sighting. No opening up works were carried out (except as noted) and we rely on the Architects and Engineers drawings provided to us for our views on concealed parts of the structure and in particular foundations. Strengths of materials and components are untested and we recommend that the factory owners Building Engineer carries out in situ testing over and above those suggested to satisfy themselves with the material strengths and component details.

Recommendations, where given, are for the purpose of providing indicative advice only, are not exhaustive, relate solely to identifying key and obvious structural defects as identified in this presentation, and do not take the form of or constitute a specification for works. We take no responsibility for the works as constructed. This report does not interfere with the factory owners Building Engineers responsibility for the structural performance of this building, The Building Engineer remains fully responsible for the structural adequacy of the building.

This report does not comment in detail on the future seismic performance of the building and only highlights the fact that the building may experience significant damage or collapse in a seismic event along with many others in the Dhaka region.

The observations in this report are based on the Engineering Judgement of the lead surveyor/engineer at the time of the survey. We assume in making these observations that no covering up of faults defects, filling or plastering over cracking or significant repair work has been carried out by the building owner. Any future alteration or additional work by the building owner will void this report.