

Moms Touch Sweater

14/2 Nayabari Road, Sataish, Tongi

(23.9173913, 90.3765121)

15 May 2024



1. Building Information

Production Building: A two-storied prefabricated steel structure.

Linking Shed: A single-storied steel shed.

Utility Building: A single-storied RC building.

Boiler Room: A single-storied RC structure.

Washing Shed: A single-storied lightweight steel roof shed.

Walkway shed: A single-storied lightweight roof shed.

Toiler Block: A single-storied masonry structure.

2. Observations

Observation-01: Lack of stability and unavailability of as-built documents. (Production Building).



During the inspection, the as-built drawing, and foundation details are unavailable. Also, design documents as well as material test reports (Steel & Geotechnical Investigation) were not available. Additionally, lateral load transfer media such as compression strut is missing for the roof shed.



The load plan was not available for the building. The building is being used as storage on the 1st floor. The building engineer is required to prepare the loading plan for the building based on the capacity of the structural members and design review. Also, post the load plan at the entry and storage area. The Factory engineer is required to ensure the implementation of the load management program.

Description: The Factory engineer is required to survey the whole structure and prepare accurate as-built drawings. Also building engineer is required to perform a Detailed Engineering Assessment (DEA) for the structure based on in-situ material strength, floor live load and geotechnical investigation report and prepare a DEA report based on the FEA model.

Observation-02: Corrosion in steel member. (Production Building)



Description: Corrosion was in the steel member. The building engineer is required to provide rust-proof paint on corroded steel members to protect from corrosion.

Observation-03: Loose Cable Bracing. (Production Building)



Description: During the inspection, Loose bracing was found on the roof shed. Building engineer is required to necessary actions to tighten the roof bracing.

Observation-04: Non-structural elements not anchored or braced. (Production Building)



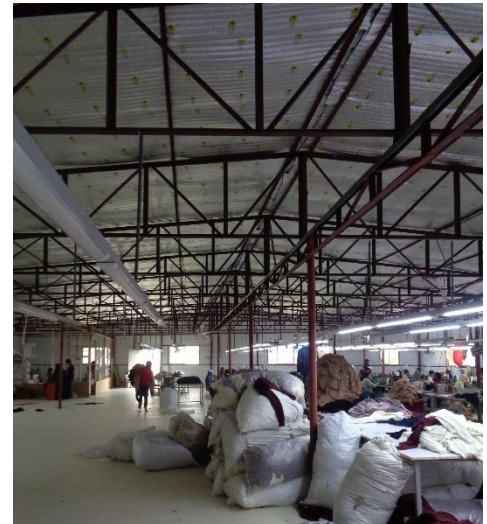
Description: Some racks on floors are not anchored or braced to resist lateral (earthquake) forces. The factory is required to anchor/brace all non-structural elements adequately to resist earthquake forces.

Observation-05: Dampness in brick wall (Production Building)



Description: During the inspection, dampness was found in the brick wall of the toilet zone. The building engineer is required to investigate the reasons of dampness and suggest proper methods to repair the dampness.

Observation-06: Lack of Lateral stability. (Linking Shed)



Description During inspection, as-built drawing was not available for the structure as well as the foundation details are unknown. Also, design documents as well as material test reports were not available. Additionally, lateral load transfer media such as wall and roof bracing is missing for the shed.

The building engineer is required to survey the whole structure and prepare accurate as-built drawing. Also building engineer is required to check the lateral stability system, connection adequacy check and foundation adequacy.

Observation-07: Lack of as-built drawings. (Utility Building and Boiler Room)



Utility Building



Boiler Room

Description: During the inspection, as-built drawing was not available for the utility building and Boiler room. Building engineer is required to prepare a full set of as-built drawing for both structures.

Observation-08: Exposed re-bar on the roof. (Utility Building & Boiler Room)



Utility Building



Boiler Room

Description: Exposed reinforcement was found for columns of Boiler room and columns, beams and slab for utility building. The factory engineer is required to provide anti-corrosive coating in the rebar to prevent corrosion in exposed rebar.

Observation-09: Lightweight shed with poor connection (Washing shed and Walking shed)



Washing Shed



Walkway shed

Description: Inadequate connections were observed at the lightweight roof of the single-storied washing shed and walkway shed. The building engineer is required to check the connection adequacy of the lightweight roof against the uplift forces.

3. Action Plan:

Serial No	Observation	Action Plan	Timeline
1	Lack of stability and unavailability of as-built documents. (Production Building).	Building engineer to Survey the whole structure and prepare accurate as-built drawings including the detailed foundation information.	within 6 weeks
2	Lack of stability and unavailability of as-built documents. (Production Building).	Building engineer is required to perform a Detailed Engineering Assessment (DEA) of the structure according to BNBC and submit it to RSC for review.	within 6 weeks
3	Lack of stability and unavailability of as-built documents. (Production Building).	Produce and actively manage a loading plan for all floor plates considering floor and column capacity.	within 6 weeks
4	Lack of stability and unavailability of as-built documents. (Production Building).	Carry out remedial work if required.	within 6 months
5	Lack of stability and unavailability of as-built documents. (Production Building).	Continue to implement the floor loading plan.	within 6 months
6	Corrosion in steel members. (Production Building)	The building engineer is required to provide rust-proof paint on corroded steel members to protect from corrosion.	within 6 months
7	Loose Cable Bracing. (Production Building)	The building engineer is required to tighten the loose cable bracing.	within 6 months
8	Non-structural elements not anchored or braced. (Production Building)	The factory is required to anchor/brace all non-structural elements adequately to resist earthquake forces.	within 6 months
9	Dampness in brick wall (Production Building)	The building engineer is required to investigate the reason of dampness and suggest proper repair methodology.	within 6 weeks
10	Lack of Lateral stability. (Linking Shed)	Building engineer is required to check the connection adequacy and lateral stability of the structure.	within 6 weeks
11	Lack of Lateral stability. (Linking Shed)	Carry out remedial work if required.	within 6 months
12	Lack of as-built drawings. (Utility Building and Boiler Room)	Building engineer is required to prepare a full set of as-built drawings for structures.	within 6 weeks
13	Exposed rebar at the roof. (Utility Building & Boiler Room)	All exposed reinforcement is to be protected from corrosion which may cause degradation of the concrete.	within 6 months
14	Lightweight shed with poor connection (Washing shed)	The building engineer is required to check the connection adequacy of the lightweight roof against the uplift forces.	within 6 weeks
15	Lightweight shed with poor connection (Washing shed)	Carry out remedial work if required.	within 6 months

16	Lightweight shed with poor connection (Walking shed)	The building engineer is required to check the connection adequacy of the lightweight roof against the uplift forces.	within 6 weeks
17	Lightweight shed with poor connection (Walking shed)	Carry out remedial work if required.	within 6 months