Tropical Knitex Ltd (Extension 2)

Chandra, Kaliakoir, 1751, Gazipur, Gazipur,

(24°2'11.4"N, 90°15'23.2"E)

30 November 2025

RSC | RMG SUSTAINABILITY COUNCIL

1. Building Informations

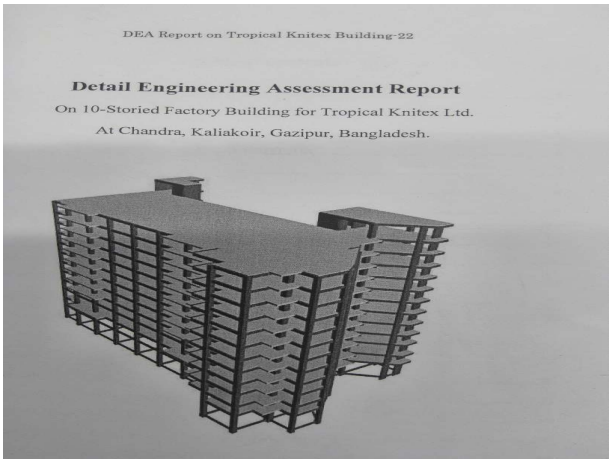
During the inspection, the structures listed below were identified and are covered part of the scope of the aforementioned factory. The factory owns all the structures. We were allowed access to all the areas of the structures.

Serial	Building Name	Building Storeys
1	Building-22	11 storied (G+10+M) building with mezzanine
2	Salt Shed	Single storied shed
3	Cement Shed	Single storied shed

2. Observation

Serial : Observation 1
Structure Name : Building-22
Observation:

Inconsistency in design report



Structural System Considerations:

The structure is located at zone-2. It consist of both shear wall and moment frame. So, Dual Systems: Intermediate Moment Frame with Special reinforced concrete shear wall has been considered for this structure.

4.4 Materials Considered In Design

Material strength considered at design stage:

Concrete:

4000 psi concrete has been proposed.

Reinforcement:

Deformed bar with minimum yield strength of 60,000 psi has been proposed.


CLIENT:
TROPICAL KNITEX LTD
CHANDRA, KALIAKOIR, GAZIPUR

REPORT ON
STATIC AXIAL PILE LOAD TEST
ON
CAST-IN-SITU TEST PILE

REPORT ON
PILE LOAD TEST ON CAST-IN- SITU PILES FOR CONSTRUCTION OF 10-STORIED FACTORY BUILDING-22 AT CHANDRA, KALIAKOIR, GAZIPUR.

TEST PILE NO:-

Pile No	Location of Pile
TP-01	TEST PILE
TP-02	TEST PILE
TP-03	TEST PILE

[MAY, JUNE-2023]

LOAD TEST PERFORMED BY:
SOIL & BUILDING TECHNOLOGY

Description:

Framing system identification and calculation not provided. Material strength calculation from the cylinder test report not included. Adequacy check of the slender columns is not included. Short column effect for 250 mm thick brick wall

Serial : Observation 2
Structure Name : Building-22
Observation:

Lack of load management program

Description:

The load management program (load plan and signage not posted) was not observed on the floors. Building engineer is required to implement floor load management program.

Serial : Observation 3
Structure Name : Building-22
Observation:

Stability of unrestrained masonry walls/cladding

Description:

There was unrestraint brick wall in the building. Building engineer is required to check the stability of the unrestrained brick walls and steel-framed glass cladding.

Serial : Observation 4
Structure Name : Building-22
Observation:

Falling hazard on the ground floor loading-unloading zone and stairs

Description:

Falling hazard was observed on the ground floor stair and loading-unloading zone

Serial : Observation 5
Structure Name : Building-22
Observation:

Potential dampness in column/beam due to steam water

Description:

Leakage of the steam pipe discharges water on the column, causing water ingress. Building engineer is required to remove the leaked steam pipes or protect the columns from water ingress.

Serial : Observation 6
Structure Name : Building-22
Observation:

Potential Trolley and vehicle impact on column/wall

Description:

Trolley impact observed, the building engineer is required to provide safety barriers and impact protection on the columns and walls.

Serial : Observation 7
Structure Name : Building-22
Observation:

Lack of anchorage for non-structural elements

Description:

Anchorage was not observed for the non-structural elements including storage racks

Serial : Observation 8
Structure Name : Salt Shed
Observation:

Building Permits not available

Description:

Building permit was not found for the structure. The building engineer is required to collect building permit from concern local authority

Serial : Observation 9
Structure Name : Cement Shed
Observation:

Building Permits not available

Description:

Building permit was not found for the structure. The building engineer is required to collect building permit from concern local authority

3. Action Plan & CAP

Item No	Observation	Action Plan	Timeline
1	Inconsistency in design report (Building-22)	Building engineer is required to prepare the design report as per BNBC 1.9.1 and incorporate all the inconsistencies.	6 weeks
2		Carry out the required remedial works where necessary.	6 months
3	Lack of load management program (Building-22)	Develop a program to ensure that all live loads for which a floor or roof has been designed for will not be exceeded. Display the floor live load plan on each floor level, provide load restriction height marking in storage areas, maintain floor live loading within allowable limit.	6 weeks
4	Stability of unrestrained masonry walls/cladding (Building-22)	Building engineer is required to check the stability of the masonry walls and cladding and suggest proper remedial actions accordingly.	6 weeks
5		Carry out the required remedial works where necessary	6 months
6	Falling hazard on the ground floor loading-unloading zone and stairs (Building-22)	Provide barrier/railing/parapet to the opening/roof/staircase/lift core/void to prevent possible falling hazard.	6 weeks
7		Restrict All acess	6 weeks
8	Potential dampness in column/beam due to steam water (Building-22)	Remove the streamline away from the structural members (column) or protect the column from water ingress.	6 weeks
9	Potential Trolley and vehicle impact on column/wall (Building-22)	Provide barrier around the structural members to protect from possible vehicle/trolly impact.	6 weeks
10	Lack of anchorage for non-structural elements (Building-22)	Provide adequate anchorage/bracing to the non-structural elements.	6 weeks
11		Provide adequate anchorage/bracing to the non-structural elements.	6 weeks
12	Building Permits not available (Salt Shed)	The factory is required to obtain building permits from the local authority.	6 months
13	Building Permits not available (Cement Shed)	The factory is required to obtain building permits from the local authority.	6 months