Consumer Knitex Limited (CMT Bangladesh) (Extension)

Dhamsur,Bhaluka,Mymensingh

(24.368265, 90.375102)

23 February 2025

RSC RMG SUSTAINABILITY COUNCIL

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Bir Uttam Mir Shawkat Sarak, Tejgaon,
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1. Building Information

1. Building -05 (Security dormitory)
2. Shed -04 (Knitting production 2)
3. Shed -05 (Knitting warehouse)
4. Shed -07 (Empty Chemical Durm store)
5. Shed -09 (Wastage shed)
6. Building -11 (REB Sub-station)

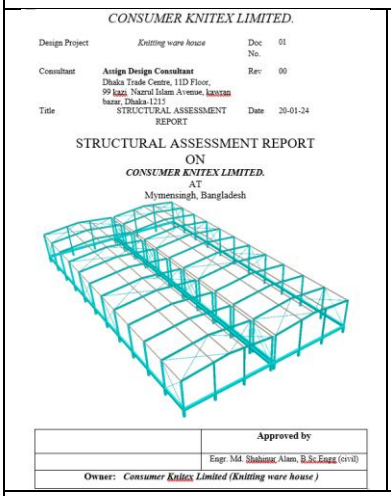
2. Observations:

Observation-1: Absence of design document (Building -05 (Security dormitory).

Description: As per BNBC, every building or structure designed shall have its design documents prepared by 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 the inspection, the design report and structural drawing were unavailable. Besides, a set of architectural and structural drawings was available without much information. Also, no load plan or test report (cylinder test report/rebar test report) was available. The building engineer is required to prepare a load plan and confirm concrete strength by taking 4 (minimum) cores from the column and prepare a Detailed Engineering Assessment (DEA).
Observation-2: Lack of information in provided drawing (Building -05 (Security dormitory).

Description: During the inspection, lack of information was observed between the provided drawing and on-site conditions. Foundation details, varies type of column schedule, roof top steel rafter size, bracing layout and steel stair information were not found in the provided drawing. The building engineer is required to survey the whole structure and update the drawing reflecting actual on-site condition.

Observation-3: Lack of information in the design report (Shed -04 (Knitting production 2)).



CONSUMER KNITEX LIMITED.

Design Project: *Knitting ware house* — Doc No. 01

Consultant: **Assign Design Consultant**, Dhaka Trade Centre, 11D Floor, 99 kazi Nazrul Islam Avenue, kawran bazar, Dhaka-1215 — Rev: 00

Title: STRUCTURAL ASSESSMENT REPORT — Date: 20-01-24

STRUCTURAL ASSESSMENT REPORT
ON
CONSUMER KNITEX LIMITED.
AT
Mymensingh, Bangladesh

	Approved by
	Engr. Md. Shahinur Alam, B.Sc Engg (civil)
Owner: *Consumer Knitex Limited (Knitting ware house)*	

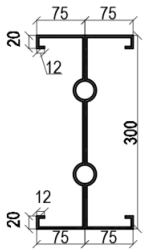
Material Specifications

No.	Components		Specifications	Strength (Mpa)
1	Built-up Members		ASTM A-50 Grade 50 Type 1 (Or equivalent)	F_y = 345
2	Hot Rolled Members	Tubes	EN 10210-1 S355J2H (Or equivalent)	F_y = 345
		Channels	EN 10025-2 Grade S355JR (Or equivalent)	F_y = 345
3	Cold Formed Members		ASTM A653M (Or equivalent)- Galvanized	F_y = 345
4	Roof & Wall Panel		ASTM A792M (Or equivalent)	F_y = 345
5	Mezzanine Deck Panel		ASTM A653M (Or equivalent)	F_y = 345
6	X-Bracing	Cable	ASTM A475 (Or equivalent)	F_t = 119 KN
		Rods	ASTM A36M (Or equivalent)	F_y = 250
		Angles	ASTM -A36M (Or equivalent)	F_y = 250
7	Anchor Bolts		ASTM -A307/A-36M (Or equivalent)	F_u = 400
8	High Strength Bolts		ASTM- A325 M Type -1 / Din 933 Grade 8.8 (Or equivalent)	F_u = 800

Description: The design report provided does not include checks for lateral load deflection, foundation, grade beam, columns, and connection adequacy. Furthermore, no steel plate test report was found during the inspection, despite the design yield strength of structural steel (fy) being considered as 50,000 psi.

The building engineer is required to confirm the material strength and update the design report in compliance with BNBC.

Observation-4: Mismatch between drawing & onsite condition (Shed -04 (Knitting production 2).

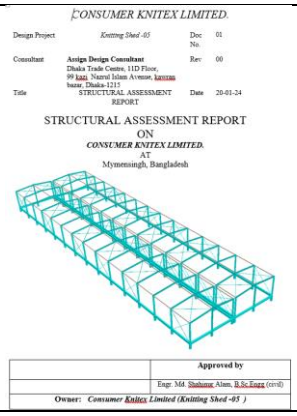


C CHANNEL-(300x75x20x12x4mm)

Description: During inspection, steel rafter and column size were found (F 3x150) x (W 3x300) instead of (F 4x150) x (W 4x300).

The building engineer is required to update the drawing based on the as-constructed structure.

Observation-5: Lack of information in the design report (Shed -05 (Knitting warehouse)).



CONSUMER KNITEX LIMITED.

Design Project: Knitting Shed -05 | Doc No: 01 | Rev: 00

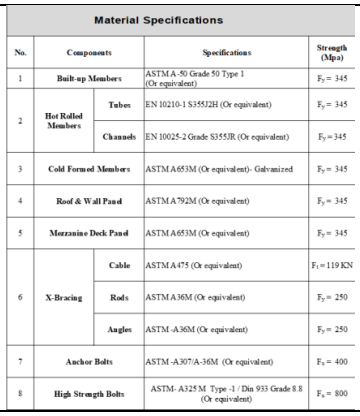
Consultant: Assign Design Consultant, Dhaka Trade Centre, 11D Floor, 99 kazi Nazrul Islam Avenue, kawran bazar, Dhaka-1215

Title: STRUCTURAL ASSESSMENT REPORT | Date: 20-01-24

STRUCTURAL ASSESSMENT REPORT
ON
CONSUMER KNITEX LIMITED.
AT
Mymensingh, Bangladesh

Approved by
Engr. Md. Shahanur Alam, B.Sc Engg (civil)

Owner: Consumer Knitex Limited (Knitting Shed -05)



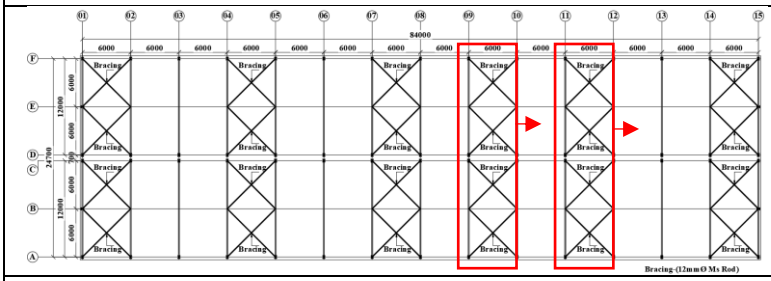
Material Specifications

No.	Components		Specifications	Strength (Mpa)
1	Built-up Members		ASTM A-50 Grade 50 Type 1 (Or equivalent)	F_y = 345
2	Hot Rolled Members	Tubes	EN 10210-1 S355J2H (Or equivalent)	F_y = 345
		Channels	EN 10025-2 Grade S355JR (Or equivalent)	F_y = 345
3	Cold Formed Members		ASTM A653M (Or equivalent)- Galvanized	F_y = 345
4	Roof & Wall Panel		ASTM A 792M (Or equivalent)	F_y = 345
5	Mezzanine Deck Panel		ASTM A653M (Or equivalent)	F_y = 345
6	X-Bracing	Cable	ASTM A475 (Or equivalent)	F_t = 119 KN
		Rods	ASTM A36M (Or equivalent)	F_y = 250
		Angles	ASTM -A36M (Or equivalent)	F_y = 250
7	Anchor Bolts		ASTM- A307/A-36M (Or equivalent)	F_u = 400
8	High Strength Bolts		ASTM- A325 M Type -1 / Din 933 Grade 8.8 (Or equivalent)	F_u = 800

Description: The design report provided does not include checks for lateral load deflection, foundation, grade beam, columns, and connection adequacy. Furthermore, no steel plate test report was found during the inspection, despite the design yield strength of structural steel (fy) being considered as 50,000 psi.

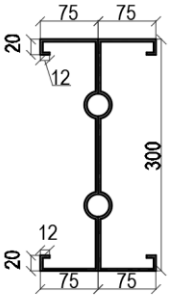
The building engineer is required to confirm the material strength and update the design report in compliance with BNBC.

Observation-6: Mismatch between drawing & onsite condition (Shed -05 (Knitting warehouse).



Roof Bracing layout

Onsite condition



C CHANNEL-(300x75x20x12x4mm)

Description: The roof bracing layout didn't match the drawing. Also, steel rafter and column size were found (F 3x150) x (W 3x300) instead of (F 4x150) x (W 4x300). The building engineer is required to update the drawing based on the as-constructed structure.

Observation 7: Lack of lateral stability, distorted truss and improper connection. (Shed -07 (Empty Chemical drum store)

Absence of load transfer media

Distorted truss out of column support

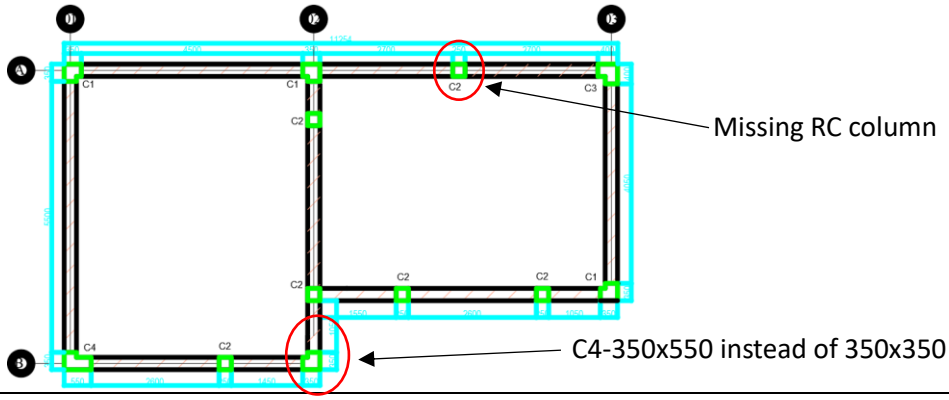
Improper connection

Description: Lateral load transfer media is not provided to transfer the lateral load. Also, improper connection and a distorted truss were observed in the roof shed.
The building engineer is required to check the lateral stability and connection adequacy of the shed and prepare the safety check report and as-built drawing.

Observation-8: Lack of information in provided drawing (Shed -09 (Wastage shed).

Description: During the inspection, lack of information was observed between the provided drawing and on-site conditions. Foundation details and connection details were not found in the provided drawing.
The building engineer is required to survey the whole structure and update the drawing reflecting actual on-site condition.

Observation-9: Mismatch between drawing & onsite condition (Building -11 (REB Sub-station).



Description: During the inspection, RC column layout did not match with prepared structural drawing. The building engineer is required to survey the whole structure and update the drawing reflecting actual on-site condition.

3. Action Plan:

Item No	Observation	Action Plan	Timeline
1.	Absence of design document (Building -05 (Security dormitory).	The building engineer is required to prepare a load plan and confirm concrete strength by taking 4 (minimum) cores from the column and prepare a Detailed Engineering Assessment (DEA).	within 6 weeks
2.		Implement remediation work if required.	within 6 months
3.	Lack of information in provided drawing (Building -05 (Security dormitory).	The building engineer is required to survey the whole structure and update the drawing reflecting the actual on-site condition.	within 6 weeks
4.	Lack of information in the design report (Shed -04 (Knitting production 2)).	The building engineer is required to confirm the material strength and update the design report in compliance with BNBC.	within 6 weeks
5.		Implement remediation work if required.	within 6 months
6.	Mismatch between drawing & onsite condition (Shed -04 (Knitting production 2).	The building engineer is required to update the drawing based on the as-constructed structure	within 6 weeks
7.	Lack of information in the design report (Shed -05 (Knitting warehouse)).	The building engineer is required to confirm the material strength and update the design report in compliance with BNBC.	within 6 weeks
8.		Implement remediation work if required.	within 6 months
9.	Mismatch between drawing & onsite condition (Shed -05 (Knitting warehouse)).	The building engineer is required to update the drawing based on the as-constructed structure	within 6 weeks
10.	Lack of lateral stability, distorted truss and improper connection. (Shed -07 (Empty Chemical Drum Store)	The building engineer is required to check the lateral stability and connection adequacy of the shed and prepare the safety check report and as-built drawing.	within 6 weeks
11.		Implement remediation work if required.	within 6 months
12.	Lack of information in provided drawing (Shed -09 (Wastage shed).	The building engineer is required to survey the whole structure and update the drawing reflecting the actual on-site condition.	within 6 weeks
13.	Mismatch between drawing & onsite condition (Building -11 (REB Sub-station).	The building engineer is required to survey the whole structure and update the drawing reflecting the actual on-site condition.	within 6 weeks