APPARELS JB21 LTD

FS SFB #4, Road #2, Bay Area, CEPZ, Chattogram

(22.291828, 91.777597)

31 October 2024

RSC RMG SUSTAINABILITY COUNCIL

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1. Building Information:

Building 1 (MAIN PRODUCTION BUILDING):	Five-storied (G+4) building
Ancillary Building-1 (Boiler Room):	Single storied building
Ancillary Building-2 (Utility Building):	Single storied building
Ancillary Building-3 (PUMP ROOM):	Single storied (underground) building
Ancillary Building-4 (SECURITY ROOM):	Single storied building
Ancillary Building-5 (CMS ROOM):	Single storied shed

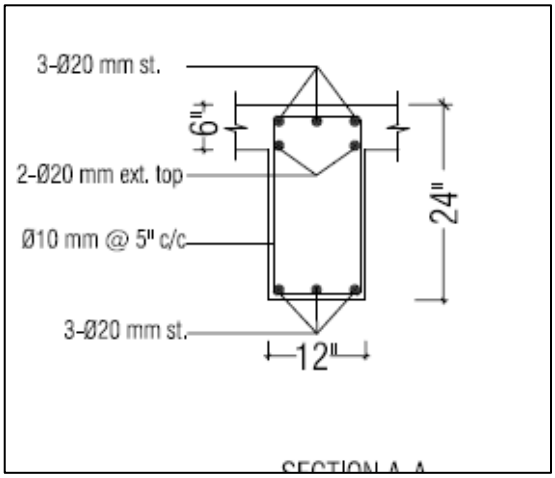
2. Observations

Observation-1: Prepared design report needs to be reviewed against lateral loadings. Building 1 (MAIN PRODUCTION BUILDING)

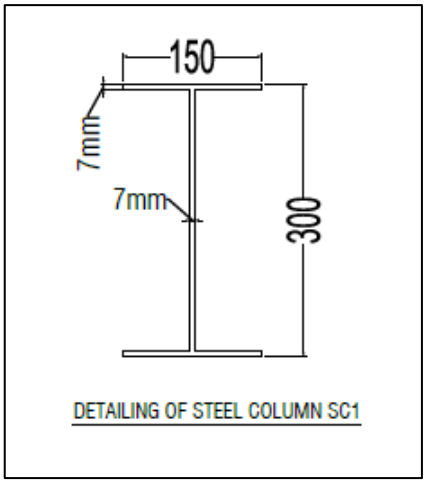
Design report, new core cutting, and extra braced bays

Description: During the inspection, a Detail Engineering Assessment (DEA) report was found onsite. New cores were taken to confirm the design strength. Additional braces are installed in the rooftop shed. Also, some discrepancies were observed in the structural member sizes. For portal frame steel framing response modification factor is considered as 8 without proper justification. However, the building engineer is required to revise the prepared DEA report based on as-built framing & member sizes. Submit the revised DEA documents to the RSC for detailed review against lateral forces.

Observation-2: Discrepancy in as-built drawing. Building 1 (MAIN PRODUCTION BUILDING)

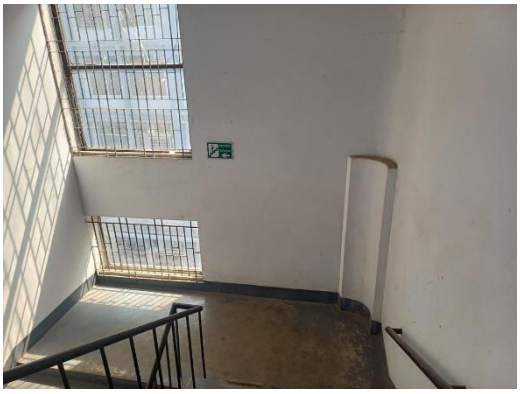


RB1 was measured as 350x475 mm which was shown as 300x475 mm in the drawing



Flange thickness of SC1 was measured 6 mm onsite where 7 mm shown in the drawing

Extra bracing was observed in two bays



Retrofitting column didn't reach the proposed floor level

Structural details of the rooftop RO shed were not available

Description: During the inspection, discrepancies and lack of information were observed between the provided drawing and on-site conditions. Floor beam RB1 was measured 350x475 mm which was shown 300x475 mm in drawing. Flange thickness of Steel column SC1 was measured 6 mm onsite which was shown as 7 mm in as-built drawing. Also, some drawings were incomplete. The building engineer is required to survey the whole structure and update the drawing reflecting on-site conditions.

Observation 3: Gap between steel connection plates. Building 1 (MAIN PRODUCTION BUILDING)

Description: Gap was found between steel connection plates in the rooftop shed. The building engineer is required to fill the gap with suitable methods.

Observation 4: Dampness due to water ingress into the roof slab & brick wall. Building 1 (MAIN PRODUCTION BUILDING)

Slab soffit

Brick wall

Description: Dampness was found on slab soffit and wall surface. The building engineer is required to seal the source of water and repair the damp area with a suitable method.

Observation 5: Corrosion of steel members. Building 1 (MAIN PRODUCTION BUILDING)

Description: Corrosion was found on steel members of the rooftop RO shed. Building engineer is required to remove the corrosion and apply rust-proof coating on steel members.

Observation 6: Possibility of vehicle impact on columns. Building 1 (MAIN PRODUCTION BUILDING)


RC columns at the loading-unloading zone susceptible to vehicle impact

Description: RC columns on the ground floor are prone to possible vehicle impact. Signs of damage in columns were observed. Factory is required to provide separate barriers for all exposed column/slabs at the loading-unloading zone floor to prevent possible vehicle impact.

Observation 7: Column susceptible to trolly impact. Building 1 (MAIN PRODUCTION BUILDING)


Columns are susceptible to impact

Description: Columns are susceptible to impact loading from trolly. Signs of damage in columns were observed. Factory is required to provide guard for all exposed columns and walls to prevent from possible trolly impact.

Observation-8: Unbraced storage racks on different floors. Building 1 (MAIN PRODUCTION BUILDING)


Description: Unbraced storage racks were observed on different floors. The building engineer is required to provide anchorage/bracing to the storage racks to protect them from falling hazards.

5. Action Plan

Item No.	Observation	Action Plan	Timeline
1.	Prepared design report needs to be reviewed against lateral loadings. Building 1 (MAIN PRODUCTION BUILDING)	The building engineer is required to revise the prepared DEA report based on as-built framing system & member sizes. Submit the revised DEA documents to the RSC for detailed review against lateral forces.	within 6 weeks
2.		Carry out suggested remedial works if required.	within 6 months
3.		Continue to implement a proper load management plan.	within 6 months
4.	Discrepancy in as-built drawing. Building 1 (MAIN PRODUCTION BUILDING)	The building engineer is required to survey the whole structure and update the drawing reflecting on-site condition.	within 6 weeks
5.	Gap between steel connection plates. Building 1 (MAIN PRODUCTION BUILDING)	The building engineer is required to fill the gap with suitable methods.	within 6 weeks
6.	Dampness due to water ingress into the roof slab & brick wall. Building 1 (MAIN PRODUCTION BUILDING)	The factory is required to seal the source of water and repair the damp area with suitable method	within 6 weeks
7.	Corrosion of steel members. Building 1 (MAIN PRODUCTION BUILDING)	The building engineer is required to remove the corrosion and apply rust proof coating on steel members.	within 6 weeks
8.	Possibility of vehicle impact on columns. Building 1 (MAIN PRODUCTION BUILDING)	Factory is required to provide separate barriers for all exposed column/slabs at the loading-unloading zone floor to prevent from possible vehicle impact.	within 6 weeks
9.	Column susceptible to trolly impact. Building 1 (MAIN PRODUCTION BUILDING)	Factory is required to provide a guard for all exposed columns and wall to prevent from possible trolly impact.	within 6 weeks
10.	Unbraced storage racks on different floors. Building 1 (MAIN PRODUCTION BUILDING)	The building engineer is required to provide anchorage/bracing to the storage racks to protect them from falling hazards.	within 6 months