KM APPAREL KNIT (Pvt) LTD. (Extensions)

Holding No-8/A, Chanpara, P.O: Azampur, Uttarkhan, Dhaka-1230
(23.881119, 90.438585)
05 February 2023

RSC RMG SUSTAINABILITY COUNCIL

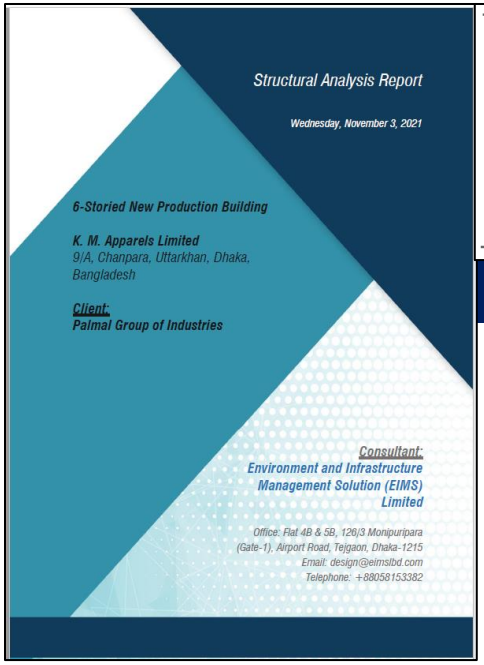
Buildings Information

1. Building-2 (New Production Building) (G+5)
2. Building-3 (Utility Building) (G+5)
3. RMS Room (single storied)
4. Guard Room (single storied)
5. Jhut Room (single storied)

Observations

Structural Analysis Report to be revised

Observations: Building-2 & Building-3



Structural Analysis Report

Construction material and strength	Concrete compressive strength, $f_c' = 4000\ psi$ for column and footing (Stone chips), and $f_c' = 3500\ psi$ for slab (stone aggregates), beam, GB, OHWR and stair as per the construction drawing; yield strength of steel deformed bar, $f_y = 72500\ psi$ as per the provided material test reports by the Client.

Material strength in the "Structural Analysis Report"

There were 11 sets of concrete cylinder test reports for the two buildings (Building-2 & 3) where 5 sets from column/shear walls. Both the buildings are 6 storied structures and construction completed between January 2017 to June 2020. The frequency of testing for the cylinder test report doesn't satisfy the BNBC requirements. The building engineer carried out "Structural Analysis Report" considering design strength 4000 psi (27.6 MPa) for column and 3500 psi (24.1 MPa) for other structural members.

However, the building engineer is required to verify in-situ material strength of the structures and revise the design documents accordingly.
Additionally, there are some movement joints (separations) among the Building-1 & Building-2 and Building-3. The building engineer is required to check the separation gap either it adequate or not and incorporate the recommendation in the design documents. Submit the design documents to RSC for review.

Observations: Building-2 & Building-3

Dampness due to water ingress

Observations: Building-2

Source of water

Dampness due to water ingress

Dampness due to water ingress was found in the female prayer room. The building engineer is required to seal the source of water and repair the damp area.

Observations: Building-2

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Loose material along the movement joints

Observations: Building-2

Loose material along the movement joints

Loose material observed along the movement joints which may be the cause of falling hazard. The factory is required to remove the loose plaster from the joints and as per the suggestion of building engineer fill the gap with appropriate (fireproof & compressible) materials.

Observations: Building-2

Anchorage for uplift forces

Observations: Jhut Room

Truss to masonry wall connection

The building engineer to verify the connection adequacy for uplift forces.

Observations: Jhut Room

Priority Actions

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Structural Analysis Report to be revised. Building-2 (New Production Building)	The building engineer is required to verify in-situ material strength of the structures and revise the design documents accordingly.	6-weeks
02	Structural Analysis Report to be revised. Building-2 (New Production Building)	The building engineer is required to check the separation gap either it adequate or not and incorporate the recommendation in the design documents.	6-weeks
03	Structural Analysis Report to be revised. Building-2 (New Production Building)	Carry out suggested remedial works if required.	6-months
04	Dampness due to water ingress. Building-2 (New Production Building)	The building engineer is required to seal the source of water and repair the damp area.	6-weeks
5	Loose material along the movement joints. Building-2 (New Production Building)	The building engineer is required to remove the loose concrete works from the joints.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
06	Loose material along the movement joints. Building-2 (New Production Building)	As per the suggestion of building engineer fill the gap with appropriate (fireproof & compressible) materials.	6-months
07	Structural Analysis Report to be revised. Building-3 (Utility Building)	The building engineer is required to verify in-situ material strength of the structures and revise the design documents accordingly.	6-weeks
08	Structural Analysis Report to be revised. Building-3 (Utility Building)	The building engineer is required to check the separation gap either it adequate or not and incorporate the recommendation in the design documents.	6-weeks
09	Structural Analysis Report to be revised. Building-3 (Utility Building)	Carry out suggested remedial works if required.	6-months
10	Anchorage for uplift forces. (Jhut Room)	The building engineer to verify the connection adequacy for uplift forces.	6-weeks
11	Anchorage for uplift forces. (Jhut Room)	Carry out remedial works if required.	6-months