

Fakir Eco-Knitwears Ltd

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(23.639339, 90.499427)

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Building Information

B+G+4, Five Storied Prefabricated Steel Building including a basement.

Observations

Observation 1: In-situ material strength needs to be verified. (Building 1 (LEED Building))

3.2 MATERIALS CONSIDERED IN DESIGN

Material strength considered

Concrete: Compressive Strength of Concrete, $f_c' = 4000$ psi (Col^m. SW) $f_c' = 3500$ psi (Others)

Reinforcement: Deformed bar design yield strength = 72,500 psi (500MPa).

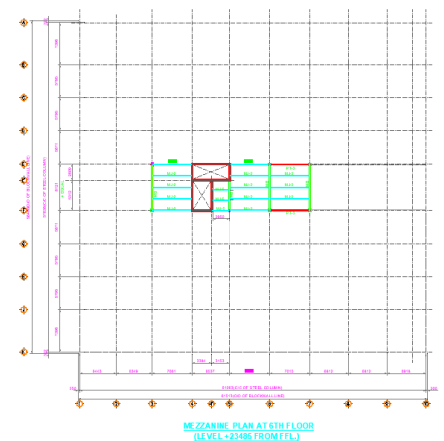
Steel Plate and others: Yield strength = 448 N/mm² (64 ksi).

Yield strength (for design) = 350 N/mm² (50 ksi).

Considered material strength in the design report

Description: Inadequate number of concrete cylinder test reports were available to confirm the design strength also the cylinder test reports do not satisfy the requirements of BNBC 5.12. The in-situ MS plate test report from the existing structural member was not provided.

Observation-2: Discrepancies in as-built drawing. (Building 1 (LEED Building))



Description: The MJ-2 rafter size did not match the as-built drawing and the cantilever portion was not shown in the as-built drawing.

Action Plan

Observation	Action Plan	Timeline
In-situ material strength needs to be verified. (Building 1 (LEED Building))	Building engineer is required to confirm the design concrete strength by taking 100 mm diameter core (min four nos) from basement.	within 6 weeks
	Building engineer is required to confirm the design MS plate strength by taking samples from the structural member.	within 6 weeks
	Carry out suggested remedial works if required.	within 6 months
Discrepancies in as-built drawing. (Building 1 (LEED Building))	Building engineer is required to produce an accurate as-built drawing reflecting the on-site condition.	within 6 months