

NHT Fashions Ltd.

Plot# 20-22, Sector#05, CEPZ, Chittagong.

(22.294426N, 91.774674E)

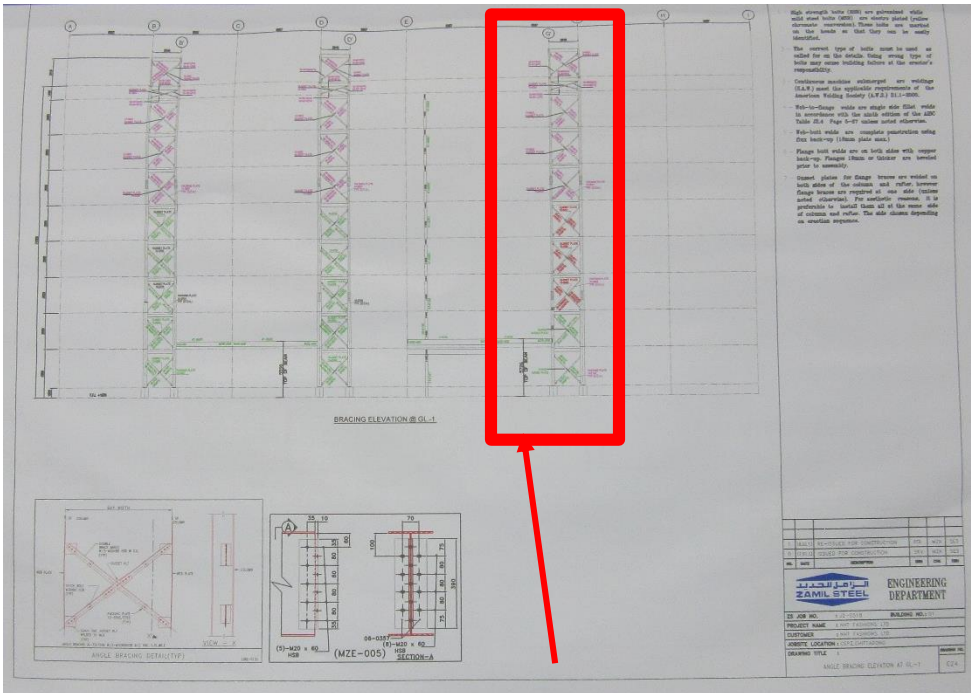
Survey Date: 8th March 2015



Observations

Stability System

Observations



Elevation on grid 1 shows bracing grid G'-G (Zamil Steel Construction Drawing E25 Rev 1)

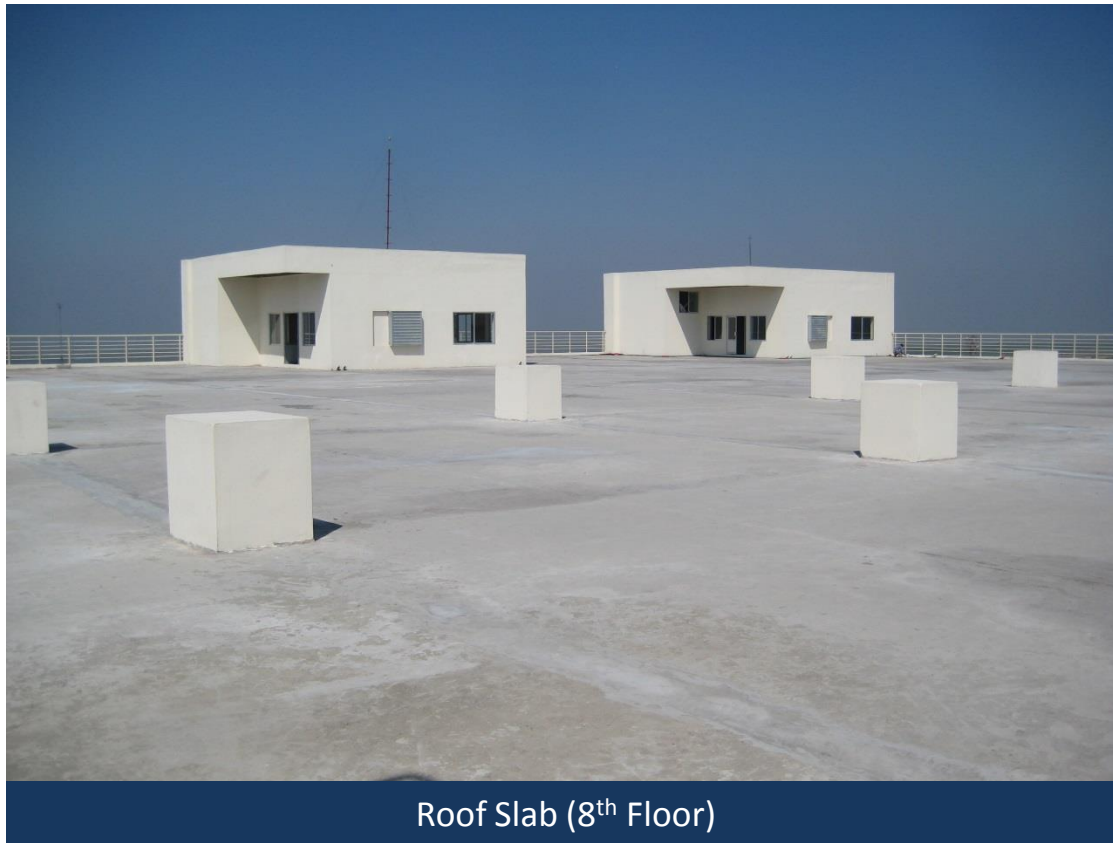


View towards grid 1 from lift shaft G'-G'. Bracing not present

Missing bay of bracing

- Construction drawings show a bay of bracing at grid 1/G'-G. This did not appear to be present in the completed building.
- The braced bays and RC walls on their own may not be sufficient to stabilize a building of this size. Therefore we assume that stability is also provided by moment frame action of the beams and columns. The stability system of the building should be reviewed by the Building Engineer.

Waterproofing of Roof



Roof Slab (8th Floor)

Waterproofing of roof

- There did not appear to be any waterproofing to the concrete roof at 8th floor.
- The concrete of the roof will be subject to large temperature changes as it heats up in the sun and cools. This will induce stresses in the structure and could lead to cracking of the concrete slab.
- In the long term the cracking and lack of waterproofing could cause leaks and durability issues for the structure.

Observations

Steelwork Fire Protection (Non Structural)



Fire protection to steelwork (Non structural item)

- The paint work to the structural steel appeared to be very thinly applied.
- Intumescent fire protection paint is usually a relatively thick coating.
- Fire protection to steelwork should be investigated.

Observations

Priority Actions

Problems Observed

- Item 1:** Missing bracing and stability system
- Item 2:** Waterproofing and thermal effects in roof

- Non Structural Item:**
- Item 3:** Fire protection to steelwork

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Missing bay of bracing and confirmation of stability system	Building Engineer to review design to determine if the apparent lack of bracing on grid 1/G-G' compromises the overall stability of the building.	6-weeks
2	Missing bay of bracing and confirmation of stability system	Install bracing if required.	6-weeks
3	Missing bay of bracing and confirmation of stability system	If the structure has not been designed as a moment frame, then building engineer to review the stability system.	6-weeks
4	Roof not waterproofed and subject to large temperature variations	Investigate options to ensure that the structure is not subject to deterioration arising from possible thermal cracking in concrete roof and consequent water penetration.	6-months
5	Roof not waterproofed and subject to large temperature variations	Consideration should be given to waterproofing the roof.	6-months
6	Determine if intumescent paint has been applied to steelwork	Determine if intumescent paint has been applied to steelwork.	6-weeks
7	Determine if intumescent paint has been applied to steelwork	To be reviewed as part of the fire engineering assessment.	6-weeks