

Interstoff Cloathing Ltd. #9494

Kalameshwer, National University, Board Bazar.

(+23.952563N, +90.381568E)

06.May.2014



ACC RD
on Fire and Building Safety in Bangladesh



Identified Priority 2 Concerns

Reinforcing steel in columns not as per drawings

No construction documents were available for the structural steel elements

COLUMN SCHEDULE					
S.L NO:-	TYPE OF COLUMN.	BELOW G. BEAM.	GROUND TO 2ND FLOOR.	3RD FLOOR TO 4TH FLOOR.	5TH FLOOR.
01	C-1	15" 8-3/4"Ø 21"	12" 8-3/4"Ø 18"	12" 6-3/4"Ø 18"	12" 6-3/4"Ø 18"
02	C-2	15" 14-3/4"Ø 18"	12" 14-3/4"Ø 15"	12" 10-3/4"Ø 15"	12" 10-3/4"Ø 15"
03	C-3	15" 12-3/4"Ø 33"	12" 12-3/4"Ø 30"	12" 8-3/4"Ø 30"	12" 8-3/4"Ø 30"
04	C-4	15" 24-7/8"Ø 31"	12" 24-7/8"Ø 28"	12" 18-3/4"Ø 28"	12" 18-3/4"Ø 28"
05	C-5	15" 22-7/8"Ø 31"	12" 22-7/8"Ø 28"	12" 16-3/4"Ø 28"	12" 16-3/4"Ø 28"

1st Priority 2 - Concern

We ferroscored 2 typical columns and found 14-22mm instead of 24 bars as per the column schedule. We require this item to be investigated in a Detail Engineering Assessment.

2nd Priority 2 - Concern



For all the structural steel roofs and canopy located at the shades and the utility buildings, no documents were available concerning the construction of these. All these structural steel must be checked by the factory engineer. Furthermore, technical documents should be produced for reference purposes.

Identified Priority 3 Concerns

No guard rail was found at the roof of the utility building close to exit.

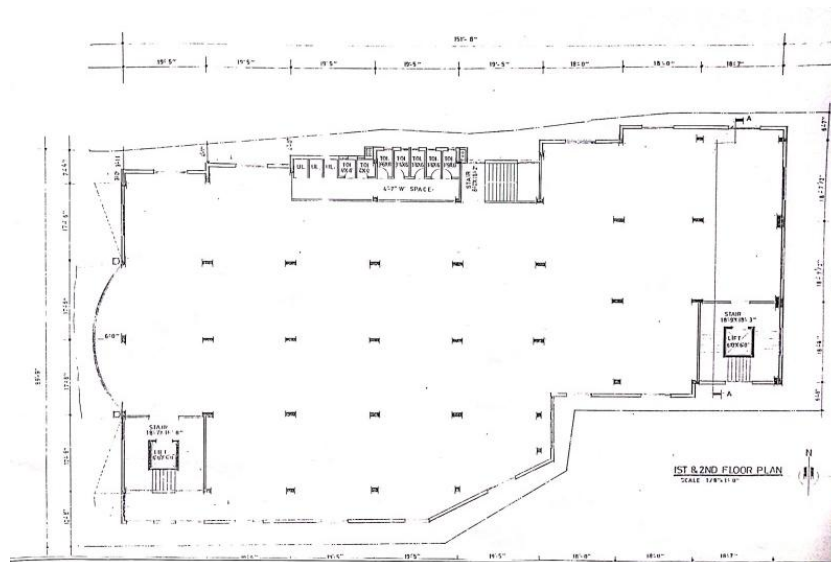


1st Priority 3 - Concern

The utility building has no hand rail or security element in place close to the access door at the roof. A security element could prevent the fall of a worker.

Distance between ledge and door is roughly 1220 mm

Overall Stability System



Sway stability of building could probably be expected from rigid frame system (beam and column participation) although no ductile detailing is provided in structural plans. Masonry infill is unrestrained and cannot be considered. Furthermore, as we can see on the drawings, the weak axis of the columns are all in the same direction.

We require that these items be investigated in a Detail Engineering Assessment immediately

Water Ingress at Roof Level



No waterproofing membrane was visible on these roofs. This means that any cracks in the surface finishes on the roof will allow water to seep into the concrete slab and cause long-term soaking of the slab.



Priority Actions

Problems Observed Summary

ITEM 1: Priority 2 – Reinforcing steel in columns not as per drawings

ITEM 2: Priority 2 – No construction documents were available for the structural steel elements

ITEM 3: Priority 3 – No guard rail was found at the roof of the utility building close to exit.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Reinforcing steel in columns not as per drawings	Loads to be limited to actual capacity of columns	Immediate – Now
2	Reinforcing steel in columns not as per drawings	Produce and actively manage a loading plan for all floor plates within the factory giving consideration the actual floor capacities and column capacities with site actual site condition	6-weeks
3	Reinforcing steel in columns not as per drawings	Maintain and manage loading plan	6-months
4	No construction documents were available for the structural steel elements	Factory engineer to assess the capacity of the steel roof and canopy construction.	6-weeks
5	No construction documents were available for the structural steel elements	Carry out any remedial works deemed necessary by the factory engineer.	6-months
6	No guard rail was found at the roof of the utility building close to exit.	Factory engineer has to design according to BBC a railing around the exit at the utility building roof.	6-weeks
7	No guard rail was found at the roof of the utility building close to exit.	Complete all necessary works.	6-months