Four Brothers Fashion - Unit 2 (Ref. 9235)

66-68 Haji Deen Mohammad Road, Dhaka Uddyan, Beribadh, Mohammadpur, Dhaka

(+23.763376N, 90.343331E)

15.MARCH.2014

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Identified Priority 2 Concerns

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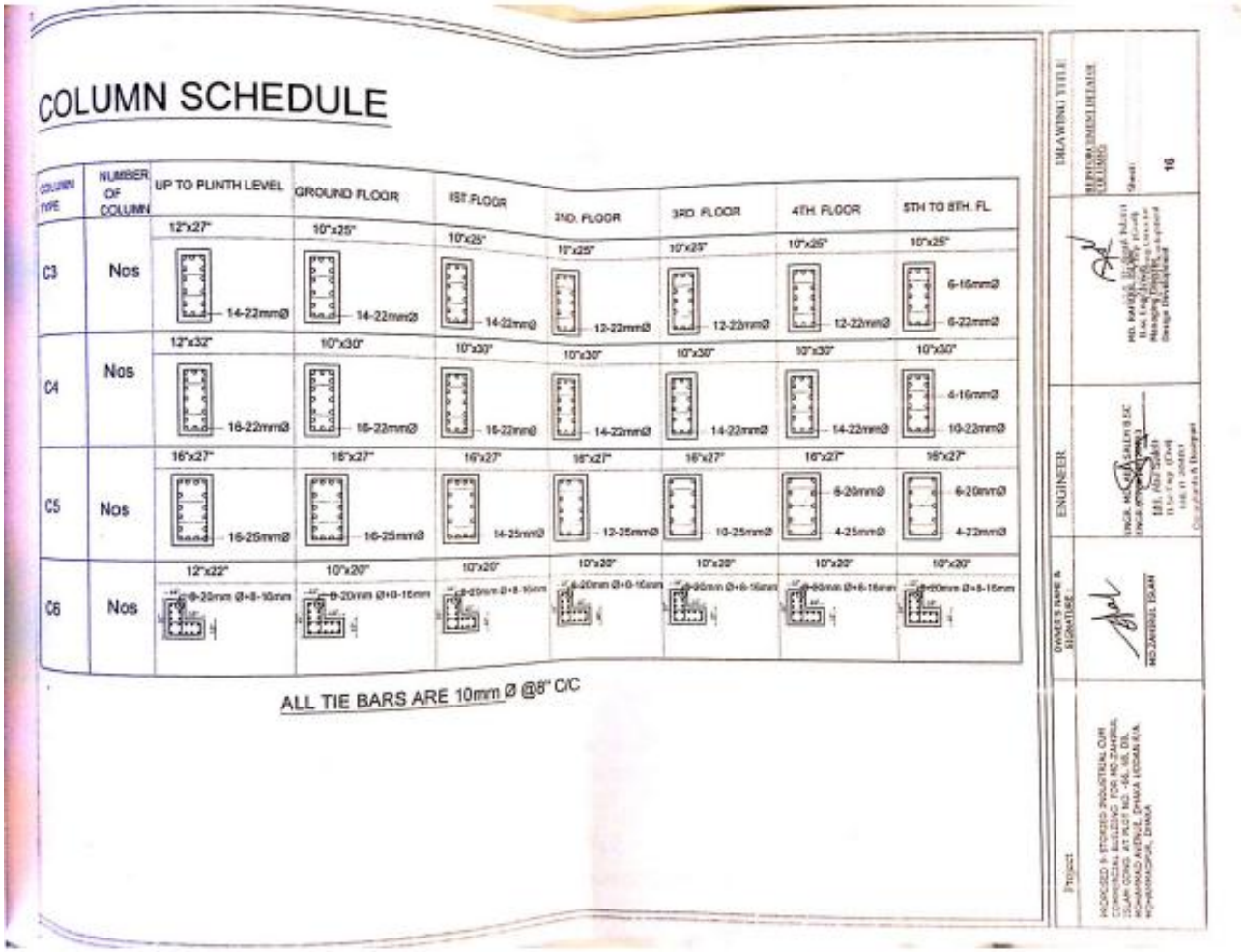
Priority 2 Concern

Typical internal columns, while matching the details set out in the structural drawings, produce a ‘yellow’ result from the column load run-down.

While not an immediate concern, a factor of safety between 1.5 and 1.86 is sufficient to warrant a review of design loads and stresses.



COLUMN SCHEDULE

COLUMN TYPE	NUMBER OF COLUMN	UP TO PLINTH LEVEL	GROUND FLOOR	1ST FLOOR	2ND. FLOOR	3RD. FLOOR	4TH. FLOOR	5TH TO 8TH. FL
C3	Nos	12"x27" 14-22mmØ	10"x25" 14-22mmØ	10"x25" 14-22mmØ	10"x25" 12-22mmØ	10"x25" 12-22mmØ	10"x25" 12-22mmØ	10"x25" 6-16mmØ 6-22mmØ
C4	Nos	12"x32" 16-22mmØ	10"x30" 16-22mmØ	10"x30" 16-22mmØ	10"x30" 14-22mmØ	10"x30" 14-22mmØ	10"x30" 14-22mmØ	10"x30" 4-16mmØ 10-22mmØ
C5	Nos	16"x27" 16-25mmØ	16"x27" 16-25mmØ	16"x27" 14-25mmØ	16"x27" 12-25mmØ	16"x27" 10-25mmØ	16"x27" 6-20mmØ 4-25mmØ	16"x27" 6-20mmØ 4-22mmØ
C6	Nos	12"x22" 8-20mm Ø+8-16mm	10"x20" 8-20mm Ø+8-16mm	10"x20" 8-20mm Ø+8-16mm	10"x20" 6-20mm Ø+6-16mm	10"x20" 6-20mm Ø+6-16mm	10"x20" 6-20mm Ø+6-16mm	10"x20" 6-20mm Ø+8-16mm

ALL TIE BARS ARE 10mm Ø @8" C/C

DRAWING TITLE

ENGINEER

OWNER'S NAME & SIGNATURE

Project

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Identified Priority 3 Concerns

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Priority 3 Concern

Lack of waterproofing layer has led to small amount of ponding at roof level.

No signs of water ingress were visible from within, however the ponding witnessed (during the dry season) suggests that it is a potential problem for the future if left untreated.

Note also the small pile of bricks. This load is not immediately concerning, but should be removed and prevented in future.

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Water Ingress at Roof Level

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No signs of water ingress visible on the soffit above 8th floor level.

Note that, as mentioned in the Priority Actions list, the lack of waterproofing at roof level leaves the potential for water ingress to develop over the long-term future of the building.

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Priority Actions

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Problems Observed Summary

ITEM 1: (Priority 2) 'Yellow' result from column load run-down, requiring further investigation before final structural safety sign-off.

ITEM 2: (Priority 3) Lack of waterproofing at roof level, leading to the potential for water ingress to develop in future.

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Item 1 and actions

'Yellow' result from column load run-down, suggesting possible overloading of columns and requiring some further investigation.

Priority 1 (Immediate – Now)	• None required.
Priority 2 (within 6 – weeks)	• Factory engineer to review design, loads and column stresses, particularly in areas more heavily loaded by boiler at 1st and 4th floors. • Verify in-situ concrete stresses, either by cores or existing cylinder strength data, for 4 typical internal columns.
Priority 3 (within 6-months)	• Produce and actively manage a loading plan for all floor plates within the factory, giving consideration to floor capacity and column capacity.

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Item 2 and actions

Lack of waterproofing layer at roof level. No current signs of water ingress, but ponding suggests the potential for future problems if left untreated.

Priority 1 (Immediate – Now)	• None required.
Priority 2 (within 6 – weeks)	• None required.
Priority 3 (within 6-months)	• Apply a waterproofing membrane to roof level, with appropriate perimeter drainage. • Monitor soffit of 8th floor to ensure that signs of water ingress do not develop.

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