Asrotex Ltd

Batjuri, Natun Bazar, Sreepur,
Gazipur, Bangladesh

23 October 2013

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ARUP

Check required on column loads and design

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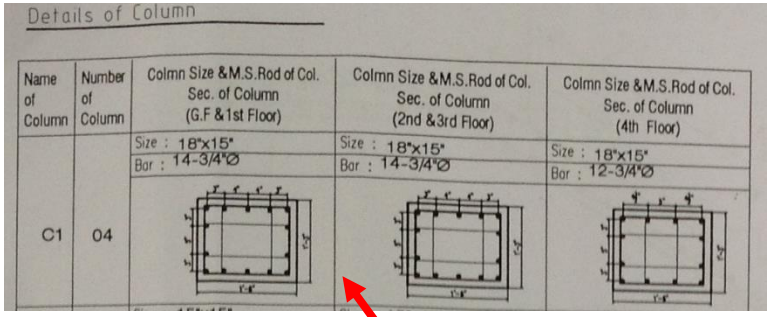
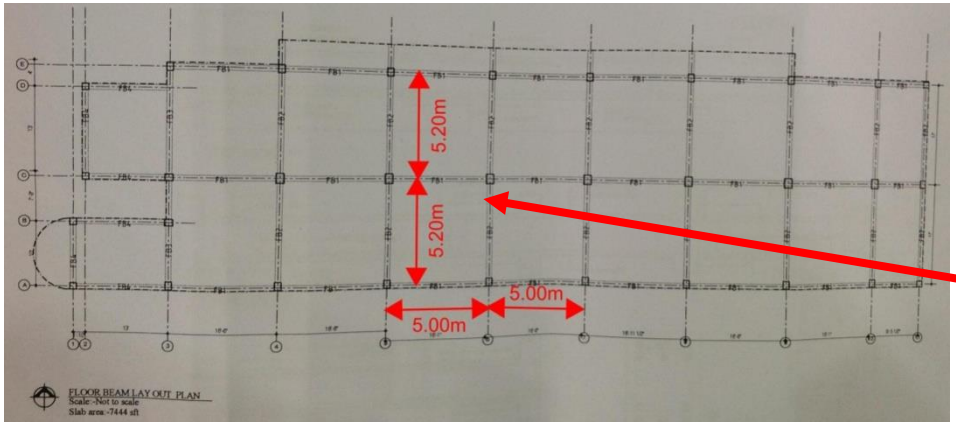


Column details according to drawing No. S-05



Column with brick aggregate on roof

Spans between columns

Check required on column load and design

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Addition of guest apartment on roof

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Roof slab to be checked for taking the loading of the walls of the apartment

Addition of guest apartment on roof that does not appear on the drawings

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Minor cracking underside roof slab

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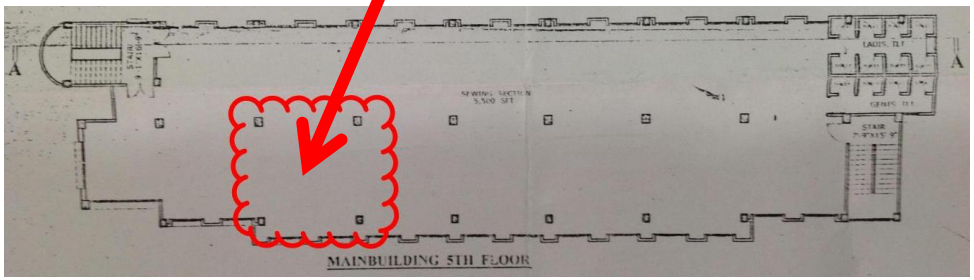
Roof slab to be checked for maximum allowable loading and cracking investigated



Minor cracking underside roof slab (ceiling of 5th Floor space)

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Degradation of beams

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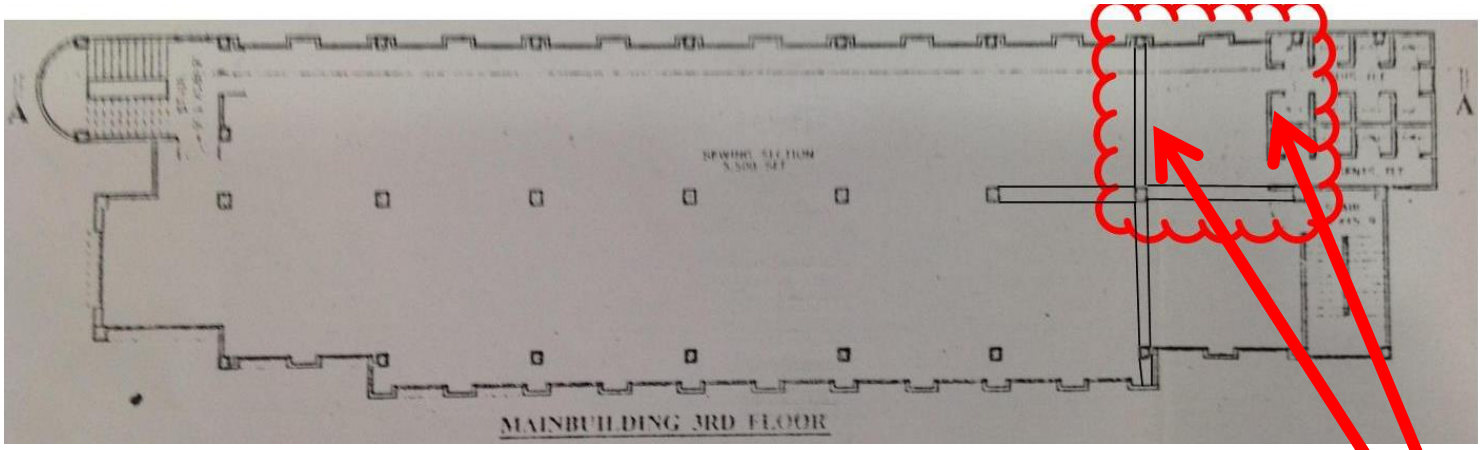

Reason for degradation to be investigated and concrete cover to be checked

Degradation of the beam on the last bay on the W side at 2nd and 3rd Floors

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Evacuation stair from Shed 3

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Escape stair from 1st Floor Shed 3 to be checked for full emergency stair loading

Evacuation Stair from Shed 3

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Lateral bracing in sheds

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Stability Checks required by building engineer for Steel Structure in the 1st Floor of Sheds 3 and 4

Lack of lateral bracing to the steel roofs of the Sheds

Priority Actions

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Problems Observed

- Check on column loads and design required
- Potential insufficient load bearing capacity of the external escape stair to Shed 3 (Embroidery and Printing)
- Addition of guest apartment on roof
- Minor cracking underside roof slab (ceiling of 5th Floor space)
- Degradation of beam (2nd and 3rd Floor)
- Lack of lateral bracing to the steel roofs of the Shed buildings 3 and 4

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Check on column loads and design required	No areas to be used for storage of stacks of 18kg boxes more than 3 boxes high	**Immediate - Now**
2	Check on column loads and design required	Factory Engineer to review design, loads and columns stresses in area identified above.	**Immediate - Now**
3	Check on column loads and design required	Verify insitu concrete stresses either by cores or existing cylinder strength data for all columns	**Immediate - Now**
4	Check on column loads and design required	A Detailed Engineering Assessment of Factory to be commenced, see attached scope.	**Immediate - Now**
5	Check on column loads and design required	Detailed Engineering Assessment to be completed.	**6-weeks**
6	Check on column loads and design required	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	**6-weeks**

Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	Check on column loads and design required	Continue to implement load plan	**6-months**
8	Potential insufficient load bearing capacity of the external escape stair to Shed 3 (Embroidery and Printing)	Get engineer to check load bearing capacity of external escape stair and provide adequate stability to stair in a proper way.	**Immediate - Now**
9	Addition of guest apartment on roof	Get engineer to check if the loading from walls of additional guest apartment can be safely carried by roof slab	**6-months**
10	Minor cracking underside roof slab (ceiling of 5th Floor space)	Get engineer to check the roof slab for maximum allowable loading	**6-months**
11	Degradation of beam (2nd and 3rd Floor)	Remedy reasons for degradation in beams of 2nd and 3rd floor and check concrete cover of beams affected	**6-months**
12	Lack of lateral bracing to the steel roofs of the Shed buildings 3 and 4	Get engineer to check stability of steel structure in first floors of sheds 3 and 4	**6-months**