

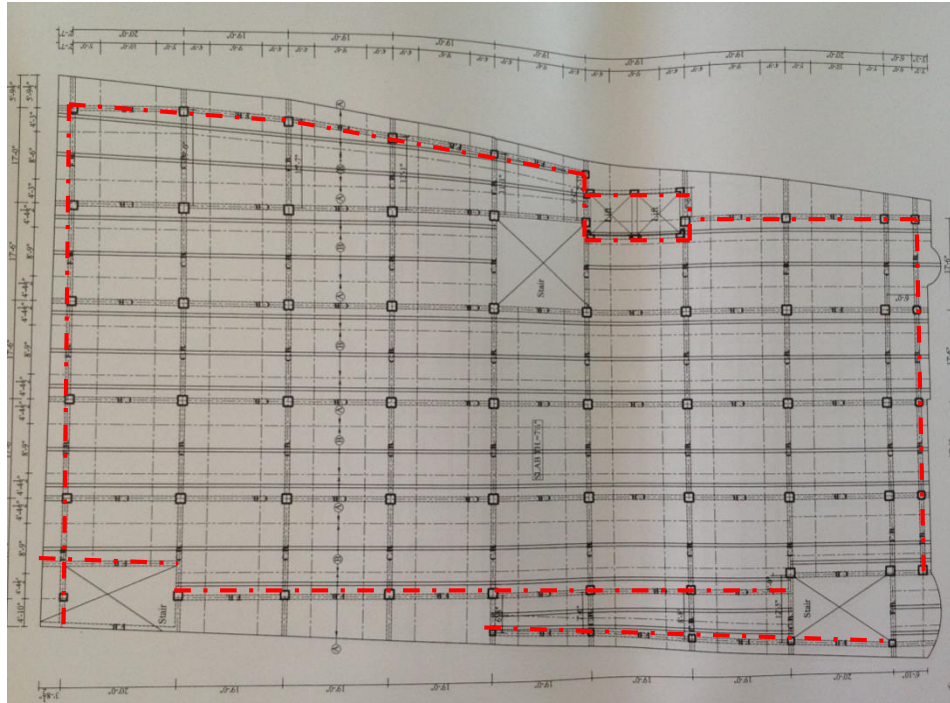
Saturn Textiles Ltd.(Woven)

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21 September 2013



Stability system lower 4th floor



Stability System

R. C. Flat slabs and columns
Moment frame stability system
at edges.

Frames disappear lower 4th
floor. Stability below 4th floor is
apported by column-slab
moment frame effect.

Building Engineer must carry
out a stability analysis of the
full 10 storey building.



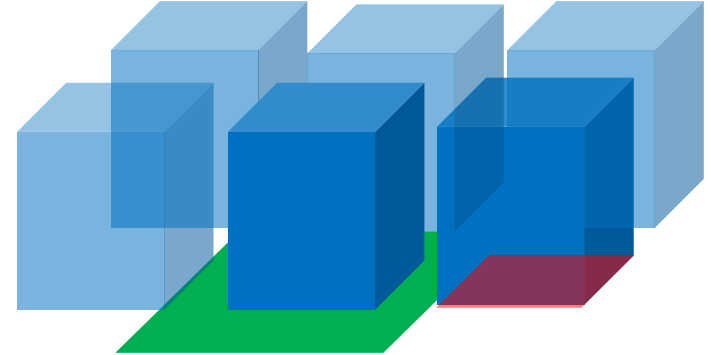
Check on roof structure from localised high loading from water tanks required



Five 5000 litres water tanks mounted on small concrete plinths

Building Engineer to check that beam and slab have been designed to accommodate loads.

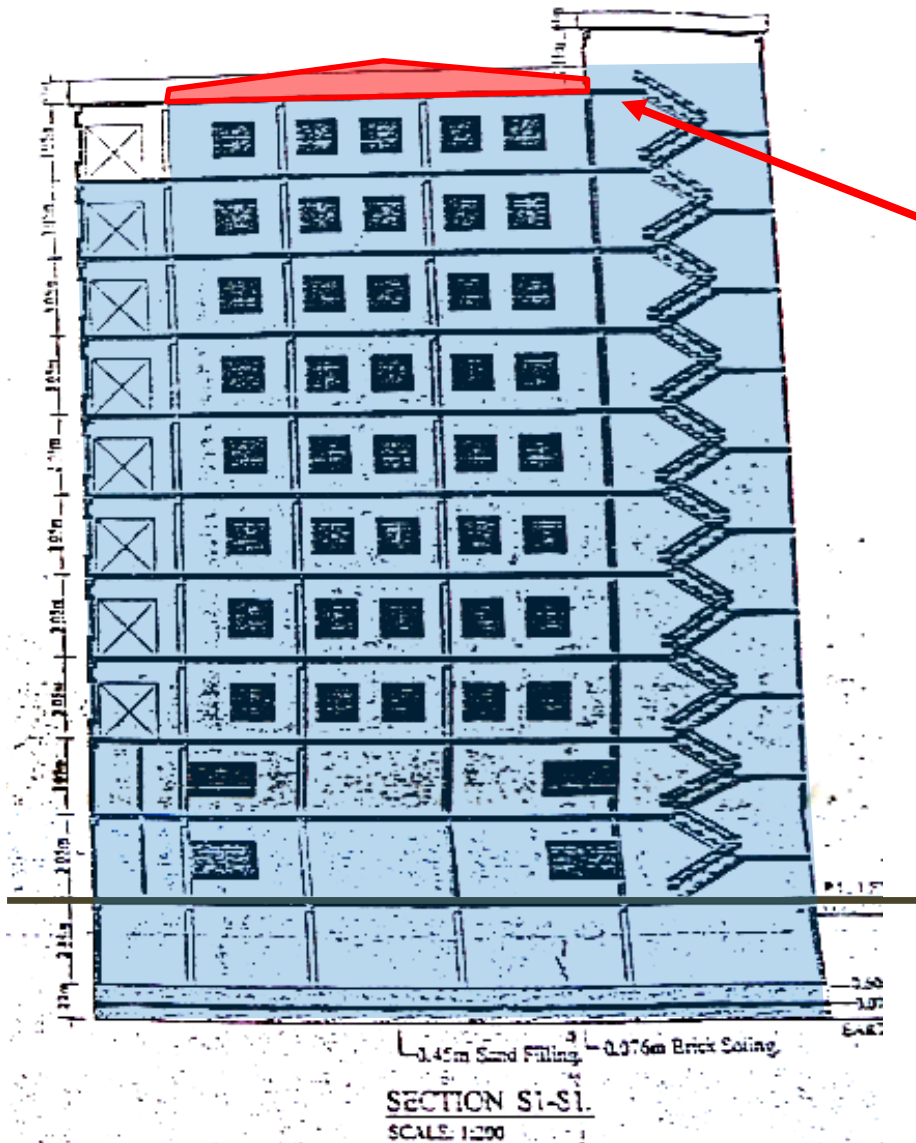
Loads on Bonded/Storege areas



Material stacked to ceiling within bonded warehouse.
Plan and height restrictions to be introduced to prevent future overloading.

Limit height to 1.80 (1.50x1.50 area) and keep 0.50-0.75 m cleared strip around.

Significant inconsistencies compared to
actual arrangement of the building at
rooftop



Lightweight roof structure doesn't agree with structural drawings for roof top.

Structural drawings show inconsistencies compared to actual arrangement of the building from 1st to 4th floor (edge downstand beams)

Inconsistencies

Priority Actions

Problems Observed

ITEM 1: Verify concrete strengths in columns

ITEM 2: Moment Frame stability system missed below 4th floor

ITEM 3: Check on roof structure from localized high loading from water tanks required.

ITEM 4: Structural drawings were not agree to the actual arrangement at top roof

ITEM 5: High density of loading in bonded warehouse and storage areas

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Verify concrete strengths in columns	Factory Engineer to review design, loads and columns stresses in area identified above.	6-weeks
2	Verify concrete strengths in columns	Verify in situ concrete stresses either by cores or existing cylinder strength data for the identified columns.	6-weeks
3	Verify concrete strengths in columns	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-months
4	Moment Frame stability system missed below 4th floor	The Engineer's drawings show an 10 storey building comprising reinforced concrete flat slab construction from 1st to 9th floor with downstand beams at edge and solid slabs with beams at G.F. and roof. Edge downstand beams has not been constructed between 1st to 4th floor. Building's Engineer must carry out a stability analysis of the full 10 storey building and propose additional stability system if necessary	6-weeks
5	Check on roof structure from localized high loading from water tanks required.	Verify that beam/slab has sufficient capacity to support fully filled water tanks plus concrete plinth	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
6	Structural drawings were not agree to the actual arrangement at top roof	The structural drawings showed inconsistencies compared to the current structure observed on site al roof top level. We suggest that the building engineer inspects and corrects these drawings soonest.	6-months
7	High density of loading in bonded warehouse and storage areas	Building Engineer to create controlled loading plans for all floors designating where storage can be placed and can not be placed.	6-months