Lodestar Fashion Ltd. #10229

Mid Asia Fashions Ltd. #10257

Industrial plot # M-16, Section – 14, Mirpur, Dhaka.

(+23.802231N, +90.377335E)

05.April.2014

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Identified Priority 1 Concerns

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1st Priority 1 Concern

Ground floor with basement is heavily loaded with equipment

Fabric stores are found on 2 levels. Loading is approximately 1.52m to 1.83m.

The combination of these 2 elements create a potential overstressing of the columns

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2nd Priority 1 Concern

Slabs and beams are in bad shape. Apparent rebar and bad pouring – structural integrity to be checked by engineer

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3rd Priority 1 Concern

Masonry column supporting concrete beam at roof to be evaluated by engineer. Loading on upper floor should be restricted and all existing material should be taken off

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4th Priority 1 Concern

Investigation of structural integrity of beam to column connection by engineer is required.

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Movement Joint

5th Priority 1 Concern

Apparent cracking in floor finish and deflection of cantilevered section was seen on site. Details vary from gridline to gridline. Engineer to evaluate capacity of cantilevered sections

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Identified Priority 2 Concerns

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1st Priority 2 Concern

Steel shed at roof of 8th story section was not apparent, but we were able to see that steel elements were not tied down to concrete elements. Furthermore, lateral stability of the trusses of these sheds is commonly insufficient.

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Identified Priority 3 Concerns

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1st Priority 3 Concern

No waterproofing membrane was visible on the roof of the building. 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 and alter the concrete characteristics.

Roof Floor does not appear to have any waterproof membrane to protect lower floor from water damage

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Overall Stability System

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Brick wall infills cannot be considered in the lateral load resisting system as they are not restrained.

Sway stability is therefore partially provided by rigid frame action between beams and columns.

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

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Priority Actions

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Problems Observed Summary

ITEM 1: (Priority 1) Column overstressing due to storage

ITEM 2: (Priority 1) Capacity assessment of slab and material proprieties below roof water tanks

ITEM 3: (Priority 1) Engineer assessment of masonry (brick) column at roof

ITEM 4: (Priority 1) Structural integrity of beam to column connection

ITEM 5: (Priority 1) Cantilevered sections at joint, at each floor

ITEM 6: (Priority 2) Steel detailing of sheds on roof

ITEM 7: (Priority 3) Roof appears not to have any waterproofing system applied.

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Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Column overstressing due to storage.	Verify insitu concrete stresses either by 100mm dia. cores or existing cylinder strength data from 4 columns. Detail Engineering Assessment of Factory to be commenced, see attached scope	Immediate – Now
2	Column overstressing due to storage.	Factory engineer to produce and actively monitor a loading plan for all floor plates within the factory complex, with consideration given to slab, column and foundation capacity	6-weeks
3	Capacity assessment of slab and material proprieties below roof water tanks.	Include in Detailed Engineering Assessment of Factory, see attached scope Evaluation of material properties of the slab and beams by coring samples Keep water level to a minimum until assessment is completed.	Immediate – Now
4	Engineer assessment of masonry (brick) column at roof.	Include in Detailed Engineering Assessment of Factory, see attached scope.	Immediate – Now
5	Structural integrity of beam to column connection.	Include in Detailed Engineering Assessment of Factory, see attached scope.	Immediate – Now
6	Cantilevered sections at joint, at each floor.	Include in Detailed Engineering Assessment of Factory, see attached scope.	Immediate – Now
7	Steel detailing of sheds on roof.	Include in Detailed Engineering Assessment of Factory, see attached scope. Assess capacity of shed to resist wind forces (down force & uplift)	6-weeks
8	Roof appears not to have any waterproofing system applied.	Consider applying a new waterproofing membrane.	6-months