

# Sonia Fine Knit Ltd.

South Shilmandi, Pachdona, Narsinghdi  
(24.004348N, 90.320706E)

28<sup>th</sup> October, 2015



# Observations

# **Floor Loading Plans to be updated to include new Third Floor currently under Construction**



Lack of Safety Rail on Roof



**Water Ponding on Roof Causes Dampness on Slab Soffit Below**



**Lack of Proper Rainwater Disposal on Roof causing Dampness on 2<sup>nd</sup> Floor Slab Soffit**



**Vegetation and Dampness on Wall**

**Observation**

# Priority Actions

# Problems Observed

- ITEM 1:** Existing DEA to be updated to include for the new third floor currently under construction
- ITEM 2:** Floor loading plans to be updated to include for four storey building
- ITEM 3:** Health and Safety precautions should be improved during the construction period.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Existing DEA to be updated to include for the new third floor currently under construction	DEA report has been prepared by an independent engineering company. We have observed differences on reinforcement quantities between drawings and our measurements on site. Verify column reinforcement and column capacities for four storey building.	6-weeks
2	Floor loading plans to be updated to include for four storey building	DEA assumed loading plans based on existing conditions on-site. Loading Plan drawings need to be updated for four storey building. Column capacities and foundation capacities should be verified.	6-weeks
3	Safety Precautions during the Construction Period	Construction works are ongoing however protective safety measures need improvement at the roof levels. These should be taken to prevent risk to human life.	Immediate - Now

# Detail Engineering Assessment

This Schedule develops a minimum level of information, Analysis and testing expected as part of a Detail Engineering Assessment.

The Building(s) have been visually assessed and it is deemed necessary that an update to the detailed engineering assessment be carried out by a competent Engineering Team employed by the factory Owner.

This Request should be read in conjunction with the BUET developed Tripartite Guideline document for Assessment of Structural Integrity of Existing RMG Factory Buildings in Bangladesh (Tripartite Document), the latest version of this document should be referenced. This document also gives guidance on required competency of Engineering Team.

We expect that the following will be included in the updated DEA:

1. Development of Full Engineering As-Built Drawings showing Structure, loading, elements, dimensions , levels, foundations and framing on Plan, Section and Elevational drawings .
2. The Engineering team are to carry out supporting calculations with a model based design check to assess the safety and serviceability of the building against loading as set out in BNBC-2006, Lower rate provisions can be applied in accordance with the Tripartite Guidelines following international engineering practice, justification for these lower rate provisions must be made.
3. A geotechnical Report describing ground conditions and commenting on foundation systems used/proposed.
4. A report on Engineering tests carried out to justify material strengths and reinforcement content in all key elements studied.
5. Detailed load plans shall be prepared for each level showing current and potential future loading with all key equipment items shown with associated loads.
6. The Engineering team will prepare an assessment report that covers the following:
  - As-Built drawings including
    - Plans at each level calling up and dimensioning all structural components
    - Cross sectional drawings showing structural beams, slabs, floor to floor heights, roof build-ups and Basic design information of the structure
  - Highlight any variation between As-built compared to the designed structure
  - Results of testing for strength and materials
  - Results of geotechnical assessment and testing/investigation
  - Details of loading, inputs and results of computer modelling
  - Commentary on adequacy/inadequacy of elements of the structure
  - Schedule of any required retrofitting required for safety or performance of Structure

Any proposals for Retrofitting to follow guidance developed in the Tripartite Document