

Oeko-Tex Limited

Yasin Knittex Ind. Ltd

South Panishail Zerani Bazar, BKSP, Gazipur, Dhaka

(23.989772, 90.259032)

16 April 2014



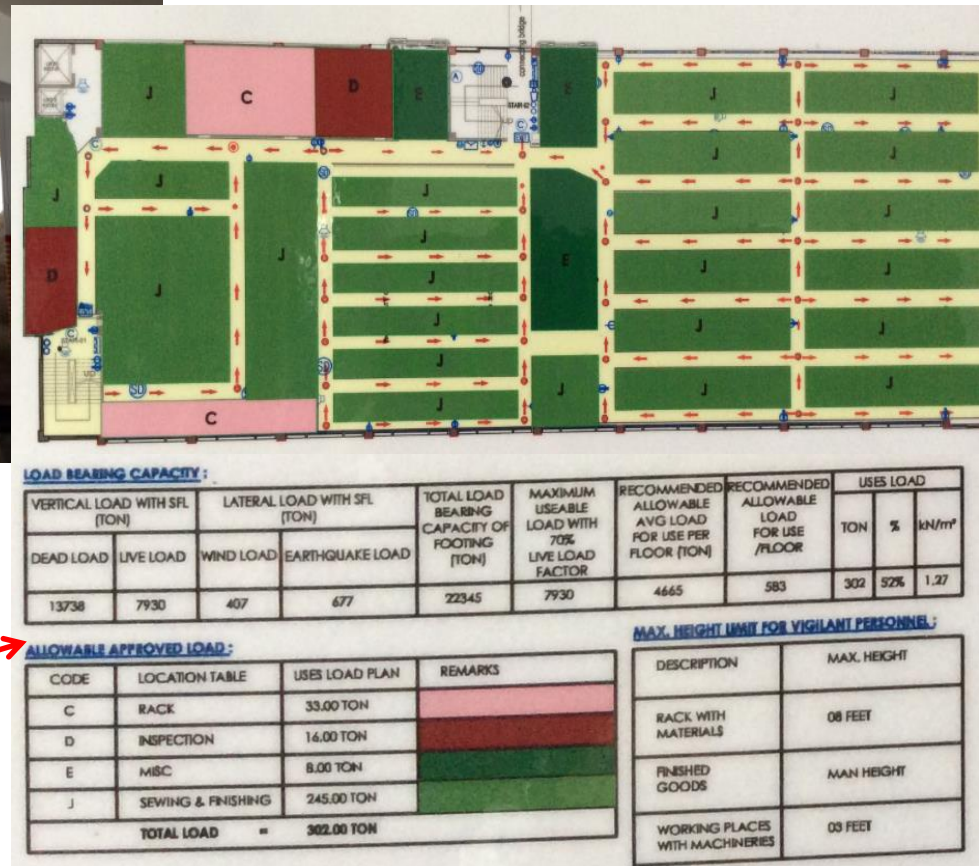
Observations

**High stress in columns in Okeo-Tex
production building, Yasin Knittex Industries
production building and Office building.**

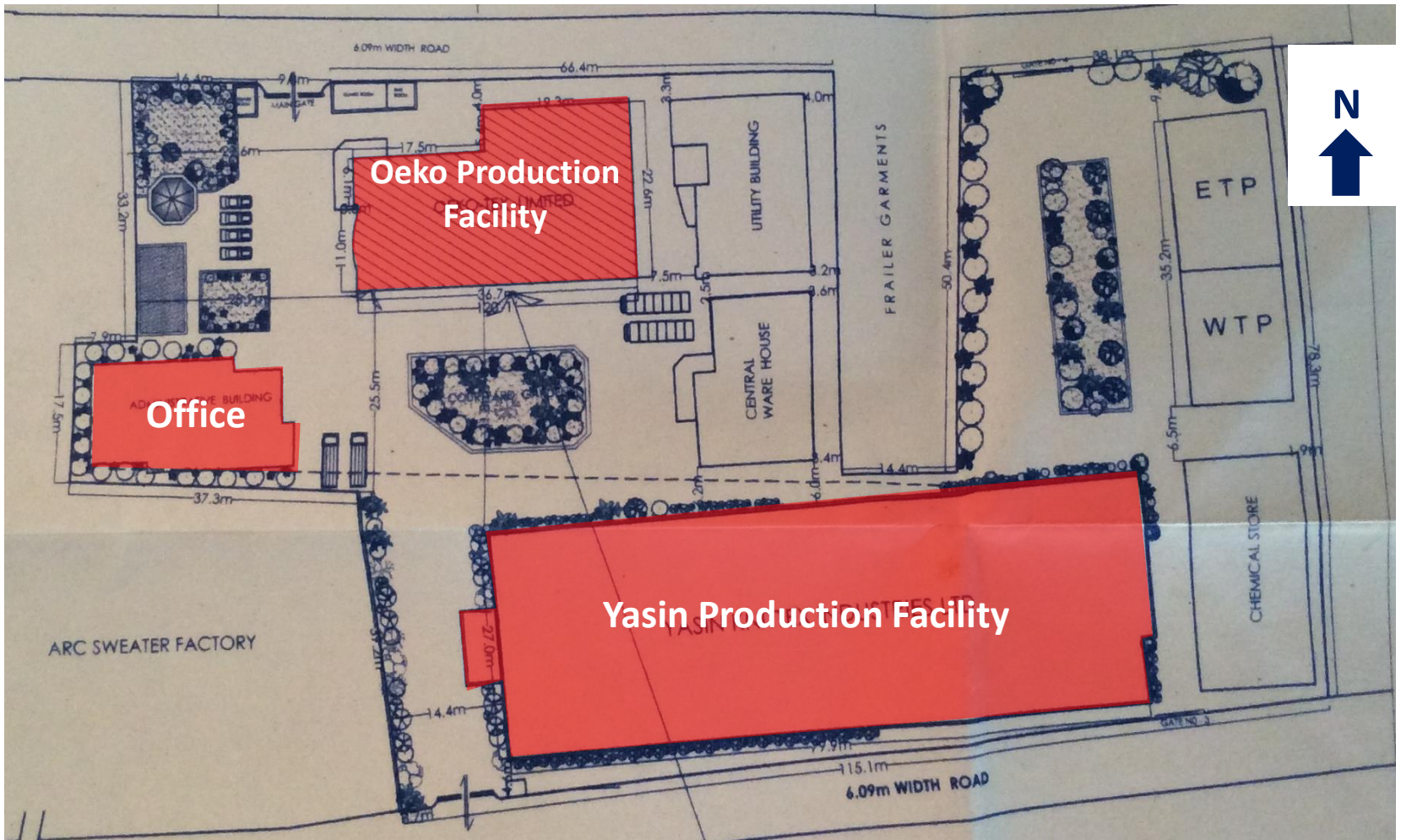


Stress in columns at ground level in these three facilities is sufficiently high to require confirmation of the in-situ concrete strength.

Loading plans for each floor in every building has been created by the factory management.



High stress in columns



Buildings requiring confirmation of their in-situ concrete strength

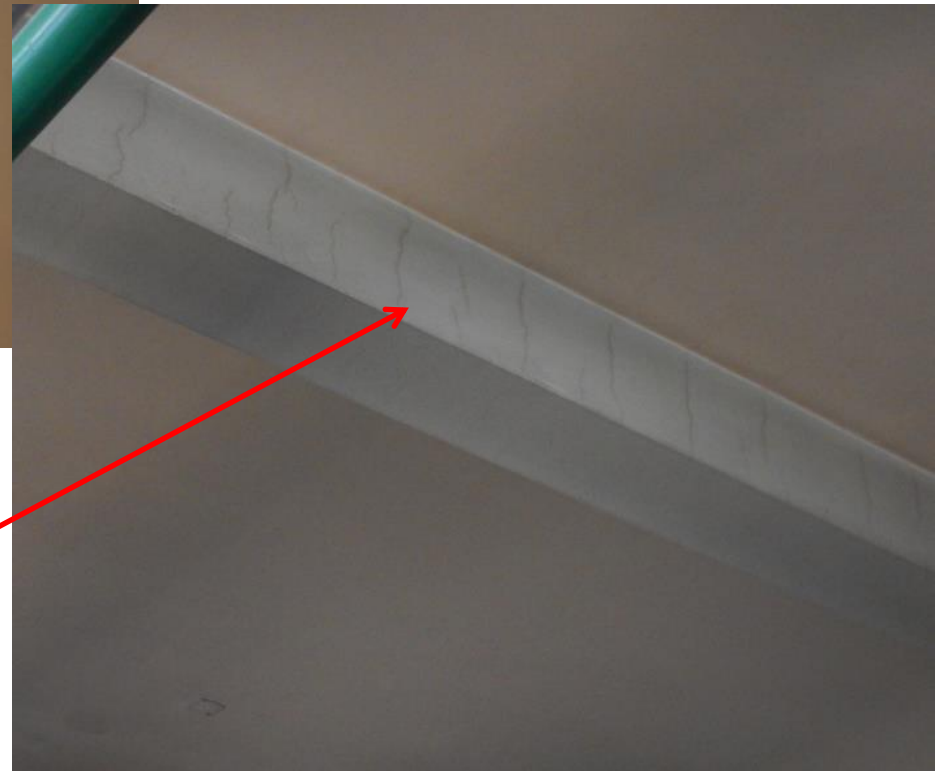
Factory Layout Plan

High stress in columns

**Cracking to beams in Yasin Knittex
Industries production building, and to slab
in the Utility building**



Cracking to beams in the Yasin Knittex Industries Production building at ground floor.

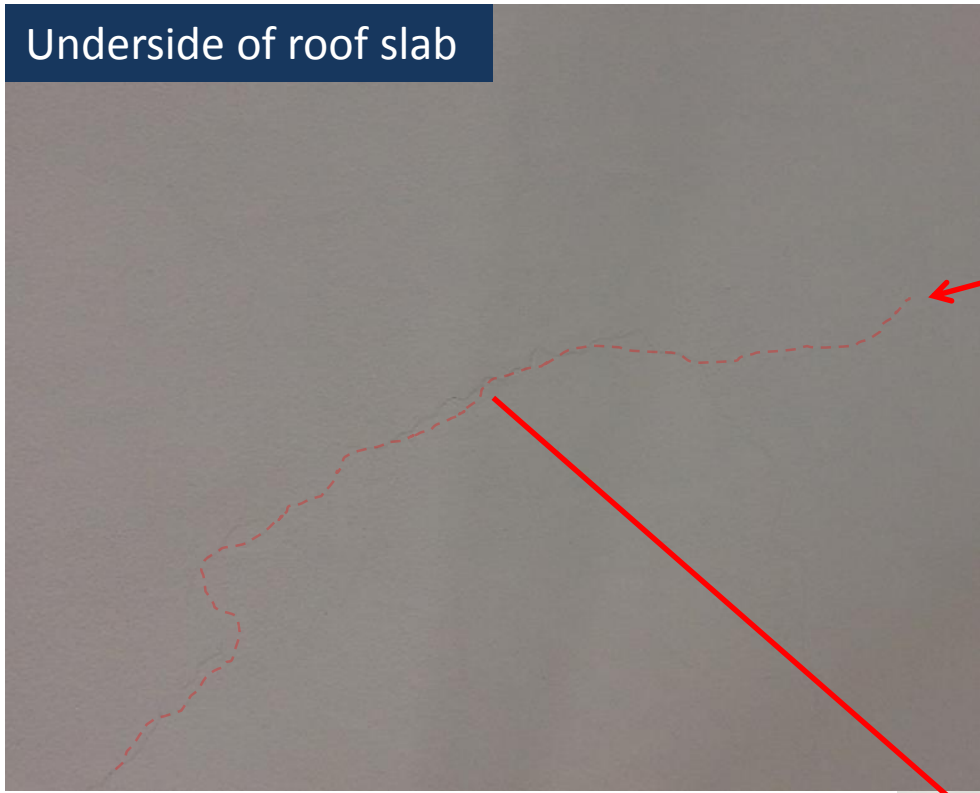


Building Engineer to inspect and monitor these cracks, and check if they are in the structure beneath the plaster.

Cracking to beams – Yasin Knittex Ind.

Underside of roof slab

Cracking to the underside of roof slab in the utility building.



Building Engineer to inspect and monitor these cracks. Also to check the slab capacity and load from water cooler above on roof.



High load locally on roof

Cracking to beams – Utility Building

Quality of steel construction at roof of Okeo-Tex production facility



Steel beams in roof construction are made from steel plates welded together. These in turn are welded to create an I-Section. The secondary beams are tack-welded only.

Building Engineer to inspect the construction of the steel sections at roof level and make recommendations to factory.



Quality of steel construction

Priority Actions

Problems Observed

1. High stress in columns in Okeo Tex production building, Yasin Knittex Industries production building and office building.
2. Cracking to beams in Yasin Knittex Industries production building and slab in the utility building.
3. Quality of steel construction at roof of Okeo Tex production facility.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	High stress in columns in Okeo Tex production building, Yasin Knittex Industries production building and Office building	Factory Engineer to review columns stresses in buildings identified above.	6-weeks
2	High stress in columns in Okeo Tex production building, Yasin Knittex Industries production building and Office building	Verify in-situ concrete strength either by cores or existing cylinder strength data for the columns in the buildings noted above	6-weeks
3	High stress in columns in Okeo Tex production building, Yasin Knittex Industries production building and Office building	Continue to actively manage the loading plans for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-months
4	Cracking to beams in Yasin Knittex Industries production building and slab in the utility building	A Building Engineer should investigate if cracks are in the structure or only in the plastering.	6-weeks
5	Cracking to beams in Yasin Knittex Industries production building and slab in the utility building	If the cracks are in the structure, Building Engineer to carry out assessment of structure, accounting for as-built reinforcement in element (from scan data) and current loading conditions.	6-weeks
6	Cracking to beams in Yasin Knittex Industries production building and slab in the utility building	Monitor cracks in the slab and beams in the areas noted above. Conduct regular inspection of these cracks.	6-months
7	Cracking to beams in Yasin Knittex Industries production building and slab in the utility building	If cracks grow larger, remove all items above the slab and close working areas below the affected areas. Engage an engineer to investigate, repair and strengthen the slab.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
8	Quality of steel construction at roof of Okeo Tex production facility	Loading on roof is not to be increased (currently empty).	6-months
9	Quality of steel construction at roof of Okeo Tex production facility	Building Engineer to inspect the quality of the constructed steel sections in the roof, with particular attention to section capacity for tack welded beam sections.	6-months
10	Quality of steel construction at roof of Okeo Tex production facility	Factory to Implement any recommendations made by the Building Engineer for the steel roof.	6-months