

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Capital Designs Limited
Address of the Factory	: Chandona Chowrasta, Gazipur, Bangladesh.
Present Status of the Factory	: Under Operation.
Structural Assessment Conducted by	: TUV
Date of Structural Inspection	: 22 nd April, 2015
Fire Assessment Conducted by	: TUV
Date of Fire Inspection	: 22 nd April, 2015
Electrical Assessment Conducted by	: TUV
Date of Electrical Inspection	: 22 nd April, 2015
BGMEA Membership No.	: 2206

BASIC INFORMATION:

The assessed factory is situated in a complex named Dilan Complex, containing two adjacent multistory buildings and ancillary buildings. The factory building is identified as Building 2 of Dilan Complex, and is a 4-Storey + 1-Semi-Storey RCC beam-column frame structure. There are two ancillary buildings functioning for the factory building: a wastage storage shed and a generator shed. The following general information was noted:

i. Building Usage Type	: Garments factory.
ii. Structural System	: RCC Beam-Column Frame system.
iii. Floor System	: RCC beam slab floor system.
iv. Floor Area	: Typical plinth area Approx. 13,250 sft. The total operational floor area of the factory is Approx. 59,630 sft.
v. No. of Stories	: 4-storey + Semi storey.
vi. Construction Year	: Phase 1: Ground floor – 1st floor; Construction period 2011 - 2012. Phase 2: 2nd floor – Semi floor; Construction period 2012 - 2013.
vii. Foundation Type	: Cast-in-Situ Piles.
viii. Design Drawings	: Available (Approved on 15th February, 2011 from the Gazipur Sadar)
ix. Soil Investigation Report	: Available.
x. Construction Materials	: Brick Aggregate at ground floor columns, Stone chips at 1 st – Semi floor columns (Identified by removing plaster)
xi. Generator	: Ancillary building at ground floor of building.

RECOMMENDATIONS FOR CORRECTIVE ACTION:

The recommendations of corrective action for both Structural and Fire & Electrical Safety comprises in Short Term, Mid Term and Long Term basis.

The recommendations for **Structural Safety** corrective action are:

Short Term (Immediate) : None.

Mid Term (6-weeks) : None.

Long Term (6-months) :

- Carry out repairing and remedial actions as directed by the Building Engineer for these cracks and dampness.

The recommendations for **Fire & Electrical Safety** corrective action are:

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(A): Recommendations for Fire Safety corrective actions:

<p>Immediate</p> <p><i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	<ul style="list-style-type: none"> • None.
<p>Short Term</p> <p><i>(Actions that must be incorporated into a Fire Safety Management Plan immediately (1 ~ 2 weeks) and should be a regular activity</i></p>	<ul style="list-style-type: none"> • None.
<p>Mid Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<ul style="list-style-type: none"> • Replace all existing exit doors on evacuation routes, exit doors with side hinged type door, which swing outward and in the direction of travel. Swinging of the door should not constrict the width of the corridor / passage below 0.9 meter. • Remove all locking device from all egress door. All exit doors should be open-able from the side they serve without the use of a key. • Provide handrails on both side of each stairway with height of 0.9m measured from the nose of stair to the top of the handrail. • Within 6 Weeks, Prepare plan and design to provide dedicated water storage tank for firefighting operation.
<p>Long Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 months)</i></p>	<ul style="list-style-type: none"> • Within 6 Months, Provide dedicated storage tank for firefighting operation.

(B): Recommendations for Electrical Safety corrective actions:

<p>Immediate</p> <p><i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	<ul style="list-style-type: none"> • None.
<p>Short Term</p> <p><i>(Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity</i></p>	<ul style="list-style-type: none"> • None.

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<p>Mid Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<ul style="list-style-type: none">• Provide circuit diagram /circuit list with proper current ratings and fuse size, marking for DBs identifying end use, voltage, no. of phases.
<p>Long Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 months)</i></p>	<ul style="list-style-type: none">• 1. Provide updated SLD matching the existing installation at the factory.2. SLD to indicate exact positions of all points of switch boxes and other outlets.3. SLD to be approved by the engineer-in-charge.