Name of the Factory	: Defoin Design (Pvt.) Ltd.
Address of the Factory	: 677-678, Ashulia, Savar, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 14th January 2014
Fire & Electrical Assessment Conducted by	: BUET
Date of Fire & Electrical Inspection	: 23rd January 2014

BASIC INFORMATION:

The present garment factory is a commercial building with beam-column frame system. The following information was noted:

i.	Building Usage Type	: Primarily as Garments Factory.
ii.	Structural System	: Partly RC beam column frame structure & partly Flat plate supported on columns
iii.	Floor System	: RC solid floor slab system on RC beam (South side) and Flat plate on RC columns (north side).
iv.	Floor Area	: Approx. 14200 sft/floor (as per structural drawing).
v.	No. of Stories	: 3 (Three)
vi.	Construction Year	: 2001-2005 (in three phases)
vii.	Foundation Type	: Individual footing (as per structural drawing)
viii.	Design Drawings	: Available (Engr. Anwar Hossain, MIEB/12922, UP approval Date 15.6.2006).
ix.	Soil Investigation Report	: Available (By the National Soil Engineers, 186/A West Kafrul, Old Taltala, Shewrapara Road, Sher-e-Bangla Nagar, Dhaka-1207, May 2013 in the name of Mark Terry).
x.	Construction Materials	: Reinforced Concrete with brick chips and steel plain rebars 40 Grade (as reported).
xi.	Generator	: One Generator is located outside the 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)	: Intensity of load does not exceed 2 kN/m^2 anywhere of any floor.
Mid Term (6-weeks)	: Core tests are required to be done. A Detail Engineering Assessment (DEA) has to be completed.
Long Term (6-months)	: Necessary remediation's after completion of DEA

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

(A): Recommendations for Fire Safety corrective actions:

Immediate (*the factory should not continue to be occupied until these non-conformities have been rectified*):	N/A

Short Term (*Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity*	Remove all temporary obstructions from all escape routes, aisles and passageways. Remove all combustible materials from transformer/ substation/ generator room. Ensure easy access to portable extinguishers and monitor and maintain the same at required interval as per guidelines.
Mid Term (*The remedial works indicated must be carried out within a period of 6 weeks)*	Produce proper drawing and plans to create horizontal and vertical fire-rated separation for stairways of appropriate specifications, grills, storage and assembly areas, offices, work areas. Also design to ensure proper separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per guidelines. Remove all collapsible gates. Produce design drawings to demonstrate how stairways are to be made of adequate dimensions and appropriate specifications and to be converted into fire-rated enclosures equipped with fire-rated side swinging doors of required dimensions opening in the direction of travel at each floor. Produce design to install standard standpipe, hose and fire pump system. Provide design to install proper detection and alarm system.
Long Term (*The remedial works indicated must be carried out within a period of 6 months)*	Install horizontal and vertical fire-rated separation for stairways of appropriate specifications, grills, storage and assembly areas, offices, work areas. Ensure proper fire separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per approved design. Install fire rated enclosure and doors of appropriate dimensions at exit to the stairs to prevent smoke and fire propagation as per approved design. Install standard standpipe, hose and fire pump system. Install proper detection and alarm system. Provide fire rated enclosure, install self closing fire rated door as per guidelines.

(B): Recommendations for Electrical Safety corrective actions:

Immediate (*the factory should not continue to be occupied until these non-conformities have been rectified*):	N/A

Short Term (*Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity*	Provide instructions for first aid and artificial respiration from exposure to electrical shock. Provide cover on the cable trench. Ensure well-dressed cabling with lugs and remove loose cabling. Ensure earthing of panel body & door with fitted condition. Provide distribution board as per guideline and put identification mark on distribution panel. Remove burn/broken/loose MCB/MCCB box/socket.
Mid Term (*The remedial works indicated must be carried out within a period of 6 weeks)*	Provide separate service ducts for electrical cables. Provide new Emergency Lighting system. Provide appropriate Lightening Protection System as per guidelines.
Long Term (*The remedial works indicated must be carried out within a period of 6 months)*	N/A