

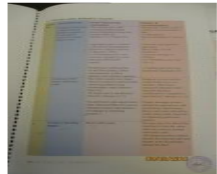




Structural Safety Inspection


Factory Name	Nafa Apparels Ltd.(Former Palma Knitwear Factory Ltd)	Accord ID	10154
Factory Address	Hizalhati, Baroipara, Kaliakoir, Gazipur		
Inspection Date	04/13/2014		
Date of Review Inspection	8-Jun-16		
Inspected by	Sudip Kumar Sarker		






Item No	Accord Observation	Accord Recommendation	Accord Timeline	Final Action Plan	Final Timeline(DD/MM/YYYY)	Comments after Physical Inspection	Progress Status	Pictorial Evidence
1	Columns within the 3 storey Factory Building appear to be stressed in excess of normal design limits. Building Engineer to verify the structural adequacy of building columns at all levels based on as built dimensions and material properties	Building Engineer to review design, loads and column stresses in area identified above.	(within 6-weeks)	Done. The DEA report was submitted to ACCORD on 06 Dec'2014 for review and approval. A initial review meeting with presentation of DEA by M/S Prudential Consultant.	06/12/2014	ON 01/02/2016: The factory already completed retrofitting works and their consultant provided occupancy certificate. On verification period we found present diameter 2.30 feet with plaster instead of 1.96 feet and shown all related test document's. ON 08/06/2016: This issue is covered in DEA. Retrofitting work is completed as per acceptance DEA and factory got consent letter from consultant.	Corrected	
2	Columns within the 3 storey Factory Building appear to be stressed in excess of normal design limits. Building Engineer to verify the structural adequacy of building columns at all levels based on as built dimensions and material properties	Verify insitu concrete strength either by 100mm diameter cores or existing cylinder strength data for cores from 4 columns	(within 6-weeks)	Done.	06/12/2014	ON 01/02/2016: Done ON 08/06/2016: It is done, as a part of DEA.	Corrected	

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3	Columns within the 3 storey Factory Building appear to be stressed in excess of normal design limits. Building Engineer to verify the structural adequacy of building columns at all levels based on as built dimensions and material properties	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	(within 6-months)	Done. Load management on each floor is now maintained basing on floor load plans.	06/12/2014	ON 01/02/2016: The factory prepared load plan and maintaining load plan by a load manager. On verification period we found the load plan posted in each floor. ON 08/06/2016: Factory prepared load plan. Load plan is posted and it was observed that load is under limit.	Corrected	
4	Evidence of repairs at base of inclined columns at ground floor west side of Block A	Building Engineer to review area of repairs on an on-going basis and propose further remedial works , if required. Structural design check to be carried out if cracking reoccurs.	(within 6-weeks)	Done. Our own civil engineering team thoroughly investigated the base of inclined columns by removing paint and white cement by using sand paper and no cracks were found at the base of inclined columns at ground floor in storage area of Block-A.	06/12/2014	ON 01/02/2016: The factory already completed retrofitting works and their consultant provided occupancy certificate. On verification period we found present diameter 2.30 feet with plaster instead of 1.96 feet and shown all related test document's. ON 08/06/2016: This issue is covered in DEA. Retrofitting work is completed as per acceptance DEA and factory got QC certificate from consultant.	Corrected	 
5	Evidence of repairs at base of inclined columns at ground floor west side of Block A	Continuous monitoring for evidence of cracking at the base of the inclined columns is advised due to the fact that these columns are key structural elements.	(within 6-months)	Done. No cracks were there at the base of inclined column of Block-A.	06/12/2014	ON 01/02/2016: Covered in DEA report. ON 08/06/2016: Covered in DEA. As per DEA recommendation this cracks was not structural cracks.	Corrected	

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6	Cracking in RC beams, soffit of floor slabs and brick walls	Building Engineer to review cracking on an on-going basis and propose further remedial works , if required.	(within 6-weeks)	Done. Repair of all cracks is completed.	06/12/2014	ON 01/02/2016: On verification period we found the factory started crack repairing work and they committed to us within February 2016 will complete all crack repairing. ON 08/06/2016: During inspection it was observed that they repaired all cracks on beam soffit on floor slab. It was recommended them to monitoring this cracks. If cracks are developed again, then takes some necessary action.	Corrected	
7	Cracking in RC beams, soffit of floor slabs and brick walls	Building Engineer to continue to monitor cracks	(within 6-months)	Done. Continuous monitoring is going on. No new cracks are developed.	06/12/2014	ON 01/02/2016: On verification period we found the factory started crack repairing work and they committed to us within February 2016 will complete all crack repairing. ON 08/06/2016: During inspection it was observed that they repaired all cracks on beam soffit on floor slab. It was recommended them to monitoring this cracks. If cracks are developed again, then takes some necessary action.	Corrected	
8	Brick supports to water tank and redundant concrete plinths at roof level to Block B	Building Engineer to confirm that brick piers to water tank are non structural and that they may be removed to avoid providing an alternative support point to the water tank above which will not have been allowed for by the building designer.	(within 6-weeks)	Done. These brick piers are non structural elements. These were used as support of form work (shuttering) under bottom slab of over head water tank (OWHT) during construction and removed under close super vision of our own engineering team	06/12/2014	ON 01/02/2016: The factory already removed brick piers from OHWT bottom slab. ON 08/06/2016: Factory already removed brick piers from OHWT, it is supported on four RCC column.	Corrected	

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9	Brick supports to water tank and redundant concrete plinths at roof level to Block B	Circular water tank support plinths to be removed from northern end of roof to Block B.	(within 6-weeks)	Done. Removed.	06/12/2014	ON 01/02/2016: The factory already removed circular water tank from block -B roof top. ON 08/06/2016: Factory already removed brick piers from OHWT.it is supported on four RCC column as per DEA report	Corrected	
10	Brick supports to water tank and redundant concrete plinths at roof level to Block B	Following confirmation by the Building Engineer, brick support piers to concrete water tank to be removed.	(within 6-months)	Done. Removed.	06/12/2014	ON 01/02/2016: The factory already removed circular water tank from block -B roof top. ON 08/06/2016: Factory already removed brick piers from OHWT. It is supported on four RCC column, as part of DEA.	Corrected	
11	Management of storage loads	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	(within 6-months)	Done. Floor load plans of old 3 storied building have been prepared by M/S Prudential Consultant, Qualified Structural Engineering Consultant (QSEC). Floor load plans of block-A & B have already been prepared by our own engineering team considering the d	06/12/2014	ON 01/02/2016: The factory prepared load plan and maintaining load plan by a load manager. On verification period we found the plan posted in each floor. ON 08/06/2016: Factory prepared load plan and posted on the wall. It was observed that load is under limit.	Corrected	

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12	Cracks to building façade	Inspect façade to locate through thickness cracks. Repair cracks on both sides to avoid damp from penetrating the building	(within 6-months)	Done Repaired.	06/12/2014	ON 01/02/2016: On verification period we found the factory started crack repairing work and they committed to us within February 2016 will complete all crack repairing. ON 08/06/2016: During inspection it was observed that they repaired all cracks in building façade. It was recommended them to monitoring this cracks. If cracks are developed again, then takes some necessary action.	Corrected	
13	Inconsistencies between structural drawings and the as-constructed arrangement of the factory	Building Engineer to survey as constructed building. Updated drawings to be prepared showing the correct as constructed layout—in particular cantilever slabs and structural steel.	(within 6-months)	Done. Structural drawings of cantilever slabs of building (Block-B) have already been updated and completed.	06/12/2014	ON 01/02/2016: Covered in DEA report. ON 08/06/2016: This issue is covered in DEA. DEA was accepted on 29 Jan 2015.	Corrected	
14	Inconsistencies between structural drawings and the as-constructed arrangement of the factory	Prepare/update calculations showing the structural adequacy of the building structure taking into account the factory design imposed loading and the as built structure.	(within 6-months)	Done. The roof slab of old 3 storied building is adequate enough to take the load of Steel Structure as assessed by M/S Prudential Consultant, QSEC as part of DEA.	06/12/2014	ON 01/02/2016: Covered in DEA report. ON 08/06/2016: This issue is covered in DEA. DEA was accepted on 29 Jan 2015.	Corrected	

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15	Inconsistencies between structural drawings and the as-constructed arrangement of the factory	Prepare controlled loading plans for all floors designating allowable storage density and where storage may be placed.	(within 6-months)	Done. Floor load plans of old 3 storied building has been prepared by M/S Prudential Consultant, Qualified Structural Engineering Consultant (QSEC). Floor load plans of block-A & B have already been prepared by our own engineering team considering the d	06/12/2014	ON 01/02/2016: The factory prepared load plan and maintaining load plan by a load manager. On verification period we found the load plan posted in each floor. ON 08/06/2016: Factory prepared load plan. Load plan was posted and it was observed that load is under limit.	Corrected	
16	Steam and water drain at base of structural column	Divert steam outlet away from structural column	(within 6-months)	Done	06/12/2014	ON 01/02/2016: The factory already divert steam outlet away from structural column. ON 08/06/2016: Factory already divert this steam outlet away from structural column.	Corrected	
17	Steam and water drain at base of structural column	Divert drainage away from structural column	(within 6-months)	Done	06/12/2014	ON 01/02/2016: The factory already divert steam outlet away from structural column. ON 08/06/2016: Factory already divert this steam outlet away from structural column.	Corrected	