Texpro Eco Apparel Ltd

89/13, Ward-1, Block-C, Birulia Savar Road, Kaliakoir, Savar, Dhaka
(23.8516, 90.2918)
27 July 2022

RSC RMG SUSTAINABILITY COUNCIL

Buildings Information

1. Building 1 (Main Production Building) (G+2)
2. Building 2 (Utility Building) (single storied shed)
3. Building 3 (Childcare, Medical & Security Building) (single storied)
4. Building 4 (Dining Shed) (single storied)
5. Building 5 (RMS Room) (single storied)
6. Building 6 (Wastage Shed) (single storied)

Observations

Verify in-situ material strength

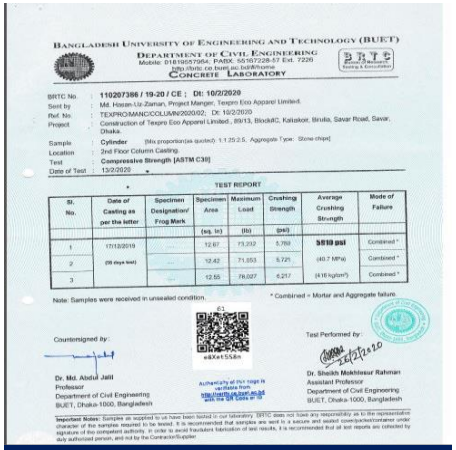
Observations: Building 1: (Main Production building)

Material Data:

Concrete compressive strength, f'c = 4000 psi for Column & Footing and, f'c= 3500 psi for beam & slab.

Rebar strength fy= 72,500 psi

Concrete strength of column considered 27.5 MPa (4000 psi) in the design report



BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)
DEPARTMENT OF CIVIL ENGINEERING
CONCRETE LABORATORY

BRTC No. : 110207386 / 19-20 / CE ; Dt: 10/2/2020
Sent by : Md. Hasan-Uz-Zaman, Project Manger, Texpro Eco Apparel Limited.
Ref. No. : TEXPRO/MANC/COLUMN/2020/02; Dt: 10/2/2020
Project : Construction of Texpro Eco Apparel Limited., 89/13, Block-C, Kaliakoir, Birulia, Savar Road, Savar, Dhaka.
Sample : Cylinder [Mix proportion(as quoted): 1:1.25:2.5, Aggregate Type: Stone chips]
Location : 2nd Floor Column Casting
Test : Compressive Strength [ASTM C39]
Date of Test : 13/2/2020

TEST REPORT

Sl. No.	Date of Casting as per the letter	Specimen Designation/ Frog Mark	Specimen Area	Maximum Load	Crushing Strength	Average Crushing Strength	Mode of Failure
			(sq. in.)	(lb)	(psi)		
1	17/12/2019	.....	12.67	73,232	5,780	5810 psi	Combined *
2	(56 days test)	.....	12.42	71,053	5,721	(40.7 MPa)	Combined *
3		.....	12.55	78,027	6,217	(416 kg/cm²)	Combined *

Note: Samples were received in unsealed condition. * Combined = Mortar and Aggregate failure.

Countersigned by:
Dr. Md. Abdul Jalil
Professor
Department of Civil Engineering
BUET, Dhaka-1000, Bangladesh

Test Performed by:
Dr. Shekh Mahbubur Rahman
Assistant Professor
Department of Civil Engineering
BUET, Dhaka-1000, Bangladesh

Important Notes: Samples as supplied by us have been tested in our laboratory. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that samples are sent to a secure and sealed cover/packet/container under signature of the competent authority in order to avoid fraudulent fabrication of test results. It is recommended that all test reports are collected by duly authorized person, and not by the Contractor/Supplier.

Concrete cylinder test report for column

Concrete strength of column is considered as 27.5 MPa in the design report. However, at the time of inspection, only 2 cylinder test report was available from column which doesn't comply the frequency of testing requirement of BNBC (chapter-5). Building engineer is required to verify in-situ material strength and revise the design report accordingly.

Observations: Building 1: (Main Production building)

Lack of lateral stability system

Observations: Building 4: (Dining Shed)

No bracing system/load transfer media provided

No load transfer media provided along long direction. In addition, no roof bracing system is provided. Building engineer is required to check the lateral stability system of the shed against the lateral loadings and suggest necessary alternatives.

Observations: Building 4: (Dining Shed)

Lack of as-built drawings

Observation: Building 6 (Wastage Shed)

Building 6: Wastage Room

As-built drawings was not available for the structure. Building engineer is required to produce as-built drawing. .

Observation: Building 6 (Wastage Shed)

Problems Observed

Building 1: (Main Production building):

Item 01: Verify in-situ material strength.

Building 4: (Dining Shed):

Item 02: Lack of lateral stability system.

Building 6: (Wastage Room):

Item 03: Lack of as-built drawings

Item 3 and actions

Lack of as-built drawing (Building 6: Wastage Shed)

Priority 1 (Immediate - Now)	• Not Required.
Priority 2 (within 6-weeks)	• Factory engineer is required to prepare full set of as-built drawings as per BNBC (part-6, section 1.9.1.2).
Priority 3 (within 6-months)	• Not Required.

Priority Actions

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Verify in-situ material strength. (Building-1: Main Production Building)	Building engineer is required to check the lateral stability system of the shed against the lateral loadings and suggest necessary alternatives.	6-weeks
02	Verify in-situ material strength. (Building-1: Main Production Building)	Carry out suggested remedial works where required.	6-months
03	Lack of lateral stability system (Building-4: Dining Shed)	Building engineer is required to check the lateral stability system of the shed against the lateral loadings and suggest necessary alternatives.	6-weeks
04	Lack of lateral stability system (Building-4: Dining Shed)	Carry out suggested remedial works where required. .	6-months
05	Lack of as-built drawing (Building 6: Wastage Shed)	Factory engineer is required to prepare full set of as-built drawings as per BNBC (part-6, section 1.9.1.2).	6-weeks