

# CERTIFICATE OF PRODUCT CONFORMITY

Dubai Central Laboratory Department (DCLD) of Dubai Municipality  
hereby attests that the product(s)

**PLASTBAU-METAL**

**SELF SUPPORTING EXPANDED POLYSTYRENE (EPS) MEAM WITH EMBEDDED GALVANIZE STEEL STRIPS**

*(Details as per the attached Scope of Certification)*

*manufactured by:*

**CONCRETE TECHNOLOGY LLC.**

**RAS AL KHAIMAH, U.A.E.**

*have been assessed in accordance with DCLD Document Ref. No. DM-DCLD-RD-DP21-2001 (IC) "General Rules for DM Third Party Product Certification Scheme Through Factory Assessment" and were found in conformity with the Technical Approval Requirements*

**TARR 035**

*Accordingly, DCLD hereby authorizes the above manufacturer  
to affix the DCL Product Conformity Mark to the above-mentioned product(s).*



**for / ENGR. AMIN AHMED AMIN**

**Director, Dubai Central Laboratory Department  
Dubai Municipality**

**Certificate No: TAC08080035**

**Valid Until: 05 November 2021**



**Current Issue Date: 06 November 2020**

**Original Issue Date: 08 April 2008**



*The attached Scope of Certification bearing the same Certificate No. forms an integral part of this Certificate.  
This Certificate is an electronic document, subject to the Terms and Conditions of the Product Certification System and shall not be reproduced except in full.*

DM-DCLD-F-IC-8003 REV 04

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|  | <b>Document Title:</b><br>SCOPE OF TECHNICAL<br>APPROVAL                                       | <b>عنوان الوثيقة:</b><br>عنوان الوثيقة:       |   |
|  | <b>Doc Ref.</b><br>DM-DCLD-F-IC-8007   | <b>رقم الوثيقة :</b><br>رقم الوثيقة :         |   |

## TECHNICAL APPROVAL CERTIFICATE NO. TAC08080035

### 1. Company:

CONCRETE TECHNOLOGY L.L.C.

P.O. Box: 31950 – Dubai, UAE ,Tel: +971-4-8801777,

Email: plastbau@concretec.ae , website: www.concretec.ae

### 2. Product Name:

PLASTBAU-METAL

### 3. Manufacturer

CONCRETE TECHNOLOGY L.L.C. - RAS AL KHAIMAH, U. A. E

### 4. Scope of approval

This Technical Approval covers the "PLASTBAU-METAL" an Expanded Polystyrene (EPS) beam with embedded galvanized steel strips to provide a self supporting characteristic.

### 5. Product description:

#### • Product Intended use

"PLASTBAU-METAL" is used as a forming system for joisted reinforced concrete floors.

When used in buildings or similar constructions, internal surfaces of polystyrene material of "PLASTBAU-METAL" shall be covered by suitable thermal barriers such as gypsum plasterboards or equivalent products. Thermal barriers shall be capable of resisting fires for a minimum time duration that complies with the Dubai Civil Defense requirements. In this regard, Dubai Civil Defense approval shall be sought for each and every project where "PLASTBAU-METAL" is to be used.

#### • Product types

"PLASTBAU-METAL" is produced in different thicknesses with a weight of 6-8 kg/m<sup>2</sup>. Thicknesses in mm are 180, 200, 220, 240, 260, 280, 300 and 320. The beams are 600mm width.

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| Approved by HOU  | Authorized by PCASM |
| Date of Issue : 17/06/2020                             | Rev. No. : 02       |
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The Expanded Polystyrene (EPS) used in manufacturing the "PLASTBAU-METAL" beams shall comply with the requirements of ASTM C 578, type VIII product.

The metal z-shape elements embedded in the EPS are 0.8mm thick zinc coated steel sheets. For the purpose of structural properties, "PLASTBAU-METAL" is designed to bear the loads shown in the following table:

| Plastbau Code  | Plastbau-Metal Beam thickness (mm) | Applied load* (KN/m') |
|--|------------------------------------|-----------------------|
| PB 18/ 3 to 8  | 180                                | 2.88                  |
| PB 20/ 3 to 8  | 200                                | 2.95                  |
| PB 22/ 3 to 8  | 220                                | 3.00                  |
| PB 24/ 3 to 8  | 240                                | 3.07                  |
| PB 26/ 3 to 8  | 260                                | 3.14                  |
| PB 28/ 3 to 8  | 280                                | 3.19                  |
| PB 30/ 3 to 8  | 300                                | 3.26                  |
| PB 32/ 3 to 8  | 320                                | 3.32                  |
| * These loads are based on the following criteria:<br>Dead load = Weight of roof RC web & screed cover for the Plastbau-Metal beams with 15% safety factor.<br>Live load = Expected live loads of working team (1.8 kN/m <sup>2</sup> ) with a 30% safety factor.<br>Loading span = 1.5m |                                    |                       |

Table 1

#### • Installation

During construction, "PLASTBAU-METAL" shall be placed over 1.5m maximum spaced supports.

Care shall be practiced during construction as to protect the "PLASTBAU-METAL" from impact loads since polystyrene may be punctured or otherwise damaged from such loads.

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### 6. Identification/Labeling/Marking

Each product item as well as the packing containers shall be identified / labeled / marked to show the required basic information (manufacturer name , the product name ,the DCL Technical Approval mark) in Arabic and/or English language.



### 7. Production quality control

The products shall be manufactured under an approved quality control program as shown in the internal quality inspection and testing plan. The quality control program shall verify continued compliance with requirements shown in Table 1.

### 8. Conditions of Approval

- 8.1. This approval is granted only to “CONCRETE TECHNOLOGY L.L.C.”, No other company, firm or person may hold or claim any entitlement to this Technical Approval.
- 8.2. This Technical Approval will remain valid for the period shown on the Approval Certificate provided that.
  - The company complies with the requirements of this Technical Approval,
  - The characteristics of the products are unchanged,

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### TECHNICAL APPROVAL CERTIFICATE NO. TAC08080035

- Continue to be checked by DM as per surveillance scheme mentioned hereinafter in this report.

8.3. In granting this Technical Approval, Dubai Municipality makes no representation to:

- The presence or absence of patent or similar rights subsisting in "PLASTBAU-METAL"
- The legal right of "CONCRETE TECHNOLOGY L.L.C." to market "PLASTBAU-METAL", in the Emirate of Dubai.

8.4. The Technical Approval shall not be used in such manner as to bring Dubai Municipality into disrepute and "CONCRETE TECHNOLOGY L.L.C." shall not make any statement which Dubai Municipality may consider as misleading.

#### 8.5 Surveillance

- Inspection and testing  
Dubai Municipality maintains the right to inspect the factory and products at any time without prior notice and to collect samples from the products available at the client's factory, warehouses or at any building site within Dubai Emirate, for the purpose of verification and/or testing.
- Complaints  
"CONCRETE TECHNOLOGY L.L.C." shall provide Dubai Central Laboratory (DCL) in writing with details of all records of complaints received whenever requested by DCL and shall keep records of such complaints for examination by Dubai Central Laboratory personnel.
- Cost of sampling and testing  
"CONCRETE TECHNOLOGY L.L.C." shall bear the cost of sampling and testing of the products either at Dubai Central Laboratory (DCL) or at any other DCL approved laboratory. The testing laboratory may be any local, regional or international laboratory.

8.6 Failing to satisfy the conditions of this Technical Approval Certificate may be grounds for terminating the Technical Approval.

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## TECHNICAL APPROVAL CERTIFICATE NO. TAC08080035

NOTE 1: This document forms part of the Certificate of Technical Approval bearing the same Certificate Number.

NOTE 2: The above product shall bear the DCL Conformity Mark (applied on each product or on the packaging).

NOTE 3: Disclaimer: The Dubai Municipality - Dubai Central Laboratory Department shall not be held liable for installation the product in the site.

The Dubai Municipality - Dubai Central Laboratory Department shall not be held liable for any action (legal or otherwise) raised by any party on matters resulting from implementation of the Technical Approval.

Original Issue Date : 08 April 2008

Current Issue Date : 06 November 2020

Valid Until : 05 November 2021



ARIF HUSAIN AL MARZOOQI

Products Conformity Assessment Section Manager  
Dubai Central Laboratory Department

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