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 - Offices : B-1932 Sint-Stevens-Woluwe, Lozenberg I, 7 Tel : (32) 2 716 42 11 Fax : (32) 2 725 32 12
 - Head office : B-1060 Brussels, Boulevard Poincaré, 79 Tel : (32) 2 502 66 90 Fax : (32) 2 502 81 80

VAT n° : BE 407.695.057 Page 1/3

LABORATORY : Structures (SC)	TEST REPORT	N° DE, DAT, RE : DE 621XA491 N° Labo : MA 3963 N° Sample : 21 / 68 / 7
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REQUESTED BY : CRAFTSTONE INTERNATIONAL PTE LTD
 65 SUNGEI KADUT DRIVE
 SINGAPORE 729564
 ATTN: MR. BENJAMIN CHNG

Q.C.

Contact persons :	- Demander - Mr Su, Chien Chou	- BBRI - Mr de Barquin
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Test carried out : Flexural strength, compressive strength

References : - NBN EN 1926 (1999)
 - NBN EN 12372 (1999)

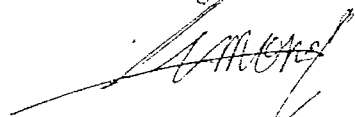
Date and reference of the request	: 04.07.2001
Date of receipt of the sample(s)	: 06.06.2001
Test date	: 24 and 25.07.2001
Drafting date of the report	: 25.07.2001

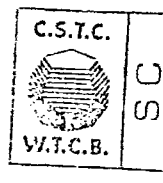
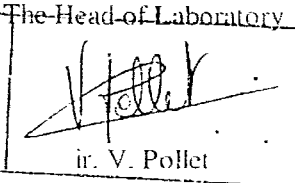
This report contains 3 pages, numbered from 1/3 to 3/3 ; it may only be reproduced in its entirety.
 Each page of the original report has been stamped (in red) by the laboratory and initialled by the head of laboratory.

The results and findings are only valid for the tested samples.

- No sample
- Sample(s) submitted to a destructive test
- Sample(s) to be removed from our laboratories 60 calendar days after sending of the report, unless a written request is received by the demander of the test

In charge of the test


 C. Simons

The Head of Laboratory


 ir. V. Pollet

Technical assistance :

CSAWS



1. INTRODUCTION

On request of Hsing Hong Construction Material Co., Ltd, represented by Mr Su, the Laboratory Structures of the BBRI has executed tests to determine the compressive strength and the flexural tensile strength on materials of the Lava Stone type.

2. SAMPLES

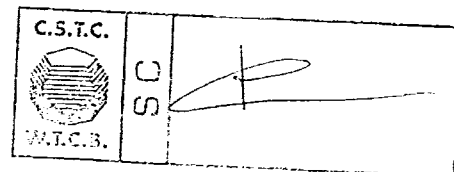
The samples have been delivered in the test centre of the BBRI in Limelette on 6 June 2001.
The test samples were registered in the register for test samples under section 21/68/7.

3. TESTS

The different compressive strength tests have been executed according to NBN EN 1926.
The dimensions (length, width, height) of the samples, the weight, the apparent density, the maximum load and the compressive strength are listed in the following table :

Sample nr	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Apparent density (kg/m ³)	Load (N)	Compressive strength (N/mm ²)
DE621XA491/001	70.04	70.39	69.94	545	1581	57200	11.60
DE621XA491/002	69.90	71.19	69.28	540	1566	58200	11.70
DE621XA491/003	69.78	71.50	69.54	540	1556	61000	12.23
DE621XA491/004	69.42	71.11	69.61	536	1560	57800	11.71
DE621XA491/005	69.76	72.07	69.37	544	1560	65100	12.95
DE621XA491/006	69.29	70.11	69.60	536	1585	66700	13.73
Average					1568	Average	12.32
Standard deviation					12.1	Standard deviation	0.86

Table 1-: Compressive strength





The different flexural tensile strength have been executed according to NBN EN 12372. The span, the dimensions (length, width, height), the weight, the apparent density, the maximum load and the flexural tensile strength are listed in the following table :

Sample n°	Span (mm)	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Apparent density (kg/m ³)	Load (N)	Flexural strength (N/mm ²)	
DE621XA491/007	150	191.61	92.19	36.31	982	1531	2550	4.72	
DE621XA491/008	150	192.71	91.67	35.88	976	1540	2880	5.49	
DE621XA491/009	150	192.87	91.7	36.64	986	1522	2990	5.46	
DE621XA491/010	150	194.48	92.23	37.27	1056	1580	2930	5.15	
DE621XA491/011	150	192.54	91.37	33.46	909	1544	2590	5.70	
DE621XA491/012	150	191.88	93.03	34.26	915	1496	2650	5.46	
DE621XA491/013	150	190.42	91.93	35.16	954	1550	2980	5.90	
DE621XA491/014	150	190.43	92.39	34.97	932	1515	2630	5.24	
DE621XA491/015	150	192.64	91.79	36.46	979	1519	2700	4.98	
DE621XA491/016	150	190.96	91.97	35.11	951	1542	2630	5.22	
						Average	1534	Average	5.33
						Standard deviation	23.0	Standard deviation	0.33

Table 2 - Flexural strength

