



AMS SUPPLIES

DECLARATION OF PERFORMANCE

Stratford Red Imperial

Essential Characteristics	Performance	Harmonised Technical Specification
Dimensions & Tolerance	230mm x 105mm x 73mm (+/-4mm) Tolerance Tm Range Rm	BS EN 772-1:2003
Configuration & Colour	Solid Frogged Colour Red	
Compressive Strength-N/mm ² (test normal to the bed face of the unit)	40 N/mm ²	
Active Soluble Salts	S1	BS EN 771
Water Absorption	10%	
Durability Against Freeze Thaw	F2	
Pallet size, Packaging & Weight	42" x 42" x 29" 320PCS 1000 KGS	

The performance of the product is in conformity with the declared performance. This declaration of performance is issued under the sole responsibility of the manufacturer. Signed for and on the behalf of the manufacturer by Sufyan Amjad Managing Director **AMS SUPPLIES**.






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PHYSICAL TESTING REPORT



ET Clay Products Ltd
Hangmans Wood Industrial Park
Stifford Road
Aveley
South Ockendon
Essex
RM15 6RL

FAO: Mrs. Keelie Ryan

Report of Tests on: IMPERIAL STRATFORD RED 68MM

Your Reference: IND/IMP/RED/68MM

Lucideon Reference: UK234229-31939

Date Reported: 29-Nov-2023

Order Number: ETCPO131725

Date Logged: 17-Nov-2023

Date(s) of Test(s): 22-Nov-2023 to 22-Nov-2023

Determination of Compressive Strength
BS EN 772-1: 2011 (By Surface Grinding) + A1 2015

	Brick Length	Brick Width	Frog Total Area	Load	Compressive Strength
No.	mm	mm	mm²	kN	N/mm²
1	224.8	107.4	5256	1128	59.7
2	227.5	110.7	5501	864	43.9
3	230.7	113.4	5789	780.6	38.3
4	231.1	112.7	5417	653.2	31.7
5	230.4	111.4	5877	824.7	41.7
6	230.1	108.6	5752	783.6	40.8
7	230.4	113.0	5501	733.7	35.7
8	230.8	110.3	5417	1110	55.4
9	231.9	111.5	5585	630.3	31.1
10	229.0	111.7	5417	992	49.2
Mean	230.0	111.0	5551	850.0	42.8

Sampling Procedure: OP148

Name of organisation carrying out sampling: ET CLAY

Method of Sampling: Not Supplied

Method of Conditioning: Dryer at 105 deg C

Method of Preparation: Surface Ground

Orientation of Loading: Bed Face

Coefficient of Variation: 22.3 %

Crushing Machine: 3000KN

Machine Number: 90011

Serial Number: COM018

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

End of Test Report

Mr Richard Oliver
Manager



0013

PHYSICAL TESTING ANALYSIS REPORT

Description: Determination of Frost Resistance

Test Method: In House Method based on prEN772-22:2018

Lucideon Reference: UK234229-31939

Client: ET Clay Products Ltd
Hangmans Wood Industrial Park
Stifford Road
Aveley
South Ockendon
Essex
RM15 6RL

For the Attention of: Mrs. Keelie Ryan

Date Logged: 17-Nov-2023

Date of Tests: 08-Dec-2023 to 22-Dec-2023

Report Date: 09-Jan-2024

Purchase Order No.: ETCPO131725

Please find attached the results for the sample(s) recently submitted for analysis.

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

Mr Richard Oliver
Manager

Lucideon Reference: UK234229-31939
Customer Reference: IND/IMP/RED/68MM
Description: IMPERIAL STRATFORD RED 68MM

DETERMINATION OF FREEZE/THAW RESISTANCE OF CLAY MASONRY UNITS
Tested in Accordance with DD/CEN/TS 772:22: 2006 – Withdrawn

1 SAMPLES RECEIVED

31 regular shaped, textured, frogged clay bricks with dimensions of 230 x 105 x 68 mm were received for testing as sampled by the client.

2 TEST PROCEDURE

2.1 Introduction

The test has been carried out in accordance with the European method DD CEN/TS EN 772-22: 2006, which involves subjecting a panel of brickwork to repeated freeze-thaw cycles designed to simulate naturally occurring conditions. From the test the bricks are given a freeze-thaw resistance classification, which categorises the bricks as being suitable to withstand the following conditions:

F2 – Severe Exposure
F1 – Moderate Exposure
F0 – Passive Exposure

The test method is summarised as follows:

2.2 Sample Preparation

Each unit was numbered and any existing defects on individual bricks noted before testing.

2.3 Construction of Test Panel

A panel of brickwork consisting of nine courses of three bricks in half bond was built to give a panel of approximate dimensions 740 x 660 mm using a 1:4 by volume High Alumina Cement: Sand mortar with bucket handle tooled finish to the joint was constructed. The panel was then left to cure in ambient laboratory conditions for a minimum of three days before testing.

2.4 Freeze/Thaw Cycles

The panel was immersed in water at room temperature for seven days before installation in a freeze-thaw apparatus which subjects the main face of the panel to repeated cycles of freezing and thawing following an initial freeze at an air temperature of -15°C for six hours. The rear of the panel was insulated with a 50 mm thick extruded polystyrene foam board and the sides insulated with a 25 mm thick polystyrene board.

A freeze-thaw cycle consists of 120 minutes (± 5 minutes) of freezing to -15°C ($\pm 3^\circ\text{C}$) air temperature, heating with re-circulated warm air to 20°C ($\pm 3^\circ\text{C}$) for 20 minutes and a two-minute flood coat spray at a water temperature of 18-25°C followed by a two-minute drain period. This gives ten cycles every 24 hours and a standard test will continue for 100 cycles.

Lucideon Reference: UK234229-31939
Customer Reference: IND/IMP/RED/68MM
Description: IMPERIAL STRATFORD RED 68MM

2.5 Assessment of Freeze/Thaw Resistance

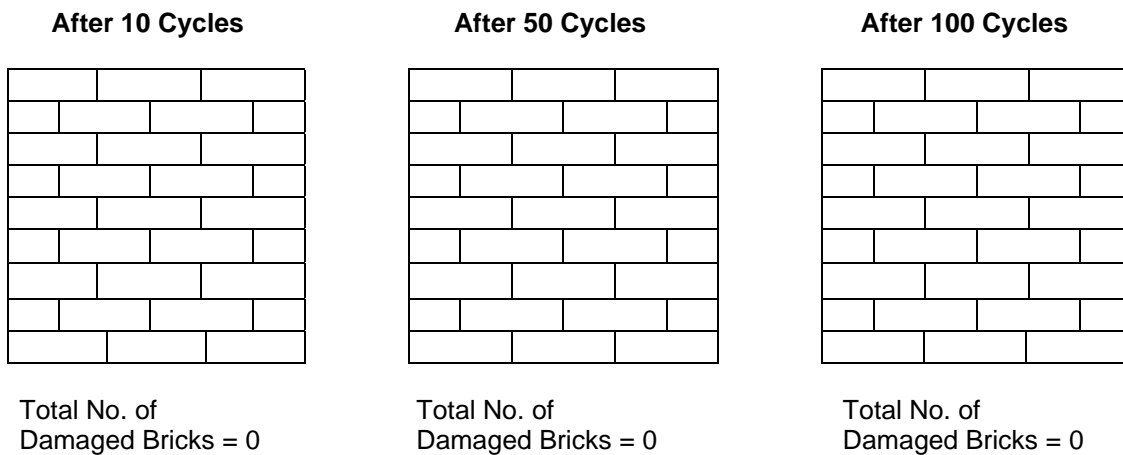
The panel was examined after 10 and 50 cycles. After 100 cycles the panel was allowed to thaw completely, removed from the apparatus and photographed. The panel was then dismantled and individual bricks examined for frost damage as categorised in Table 1.

Table 1

Categories/Types of Damage	Type
None	0
Crater (e.g. lime-burst)	1
Hair Crack ≤ 0.2 mm	2
Minor Crack	3
Surface Crack > 0.2 mm	4
Through Crack	5
Chipping, Peeling, Scaling	6
Fracture	7
Spalling, Delamination	8

2.6 Results

Incidence of Damage



Incipient delamination detected by tapping the face of the panel with a metal rod is reported as **C** at 10 and 50 cycles if delamination is confirmed at 100 cycles.

3 CONCLUSIONS

From the test carried out, no damage greater than type 3 (see Table 1) was observed after 100 freeze-thaw cycles and therefore the units are classified as being F2 i.e. suitable for use in conditions of severe exposure.

Guidance on the type of masonry subject to severe exposure conditions is given in Appendix B3.2 of BS EN 771-1 "Specifications for Clay Masonry Units". Additional guidance may be offered by the manufacturer and the use of these bricks in specific situations.

PHYSICAL TESTING REPORT



0013

ET Clay Products Ltd
Hangmans Wood Industrial Park
Stifford Road
Aveley
South Ockendon
Essex
RM15 6RL

FAO: Mrs. Keelie Ryan

Report of Tests on: IMPERIAL STRATFORD RED 73MM

Your Reference: IND/IMP/RED/73MM

Lucideon Reference: UK234229-31940

Date Reported: 29-Nov-2023

Order Number: ETCPO131725

Date Logged: 17-Nov-2023

Date(s) of Test(s): 22-Nov-2023 to 22-Nov-2023

Determination of Compressive Strength
BS EN 772-1: 2011 (By Surface Grinding) + A1 2015

	Brick Length	Brick Width	Frog Total Area	Load	Compressive Strength
No.	mm	mm	mm ²	kN	N/mm ²
1	228.0	111.2	5580	825.7	41.8
2	228.4	113.4	5375	658	32.1
3	227.5	110.8	5417	632.8	32.0
4	227.9	111.2	5623	630.9	32.0
5	225.3	109.6	5745	621.8	32.8
6	228.8	111.5	5666	691.5	34.8
7	232.0	112.1	5134	641.5	30.7
8	230.8	111.1	5379	570.4	28.2
9	227.1	109.5	5375	876.3	45.0
10	227.7	111.5	5501	577	29.0
Mean	228.0	111.0	5480	672.6	33.8

Sampling Procedure: OP148

Name of organisation carrying out sampling: ET CLAY

Method of Sampling: Not Supplied

Method of Conditioning: Dryer at 105 deg C

Method of Preparation: Surface Ground

Orientation of Loading: Bed Face

Coefficient of Variation: 16 %

Crushing Machine: 3000KN

Machine Number: 90011

Serial Number: COM018

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End of Test Report

Mr Richard Oliver
Manager



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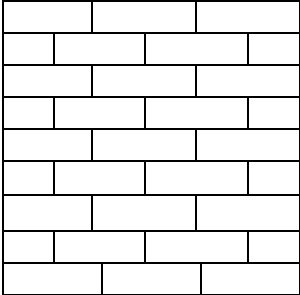
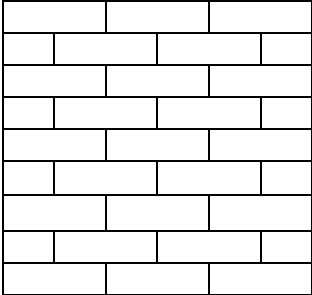
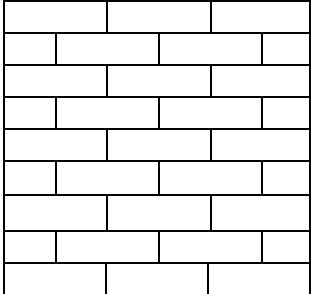
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Spalling, Delamination	8

2.6 Results

Incidence of Damage

After 10 Cycles	After 50 Cycles	After 100 Cycles
		
Total No. of Damaged Bricks = 0	Total No. of Damaged Bricks = 0	Total No. of Damaged Bricks = 0

Incipient delamination detected by tapping the face of the panel with a metal rod is reported as **C** at 10 and 50 cycles if delamination is confirmed at 100 cycles.

3 CONCLUSIONS

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