

CERTIFICATE OF CONFORMITY

N. 021/13

ISSUED TO THE COMPANY

Tognana Industrie e Fornaci S.p.A.

Via S. Antonino, 350/A - 31100 Treviso (TV)

FOR THE FACTORY

Via S. Antonino, 350/A - 31100 Treviso (TV)

FOR THE PRODUCT

Tegola Portoghese

This Certificate of Conformity has a yearly validity from the date of issue.

Type tests were made on samples selected in the factory by qualified personnel of laboratory CertiMaC

Type test results are available in test report n° 010116 - R - 3197 annexed to this Certificate of Conformity

CERTIMAC DECLARES THAT THE ABOVE MENTIONED PRODUCT HAS SUCCESSFULLY OVERCOME THE LABORATORY TESTS IN ACCORDANCE WITH THE TYPE TESTS OF THE STANDARDS

UNI EN 1304, UNI EN 1024, UNI EN 538, UNI EN 539-1, UNI EN 539-2

IMPERMEABILITY: Method 1
Category of Impermeability 1

FROST RESISTANCE: Method E, Level 3 (150 cycles)

First Issue 04/16/1998

Eng. Martino Labanti

Current Issue 02/06/2013

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€ 84.000
interamente versato


TEST REPORT

010116 - R - 3197

ANNEX TO THE CERTIFICATE OF CONFORMITY 021/13

Tests executed by

Ind. Tech. Germano Pederzoli



Ind. Tech. Federica Farina



Drawn up

Dr. Marco Marsigli



Approved

Eng. Martino Labanti



PLACE AND DATE OF ISSUE: Faenza, 02/06/2013

COMPANY: **Tognana Industrie e Fornaci S.p.A.**

ADDRESS: Via S. Antonino, 350/A
31100 Treviso (TV)

TYPE OF PRODUCT: **Tegola Portoghese**
(tile with sidelock and headlock)

STANDARD APPLIED: UNI EN 1304, UNI EN 1024, UNI EN 538,
UNI EN 539-1, UNI EN 539-2

DECLARED VALUES:

LENGTH 415 mm
WIDTH 255 mm
CAMBER 0.0 mm
FIXING Yes

SAMPLING DATE: 12/17/2012

TESTS EXECUTED: January - February 2013

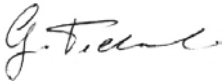
TESTS EXECUTED AT: CertiMaC, Faenza

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Test	N. specimens	Results	Acceptance limits
Appearance and structure N. unsatisfactory specimens	100	0	≤ 5
Flexural strength Minimum breaking load Average breaking load Maximum breaking load Standard deviation	10	3.35 kN 3.90 kN 4.67 kN 0.41 kN	$F \geq 1.20 \text{ kN}$
Impermeability Maximum impermeability Average impermeability Category of impermeability	10	0.06 cm ³ cm ² gg ⁻¹ 0.05 cm ³ cm ² gg ⁻¹ 1	<u>Category 1</u> $IF \leq 0.60 \text{ cm}^3 \text{ cm}^2 \text{ gg}^{-1}$ $\bar{IF} \leq 0.50 \text{ cm}^3 \text{ cm}^2 \text{ gg}^{-1}$ <u>Category 2</u> $IF \leq 0.90 \text{ cm}^3 \text{ cm}^2 \text{ gg}^{-1}$ $\bar{IF} \leq 0.80 \text{ cm}^3 \text{ cm}^2 \text{ gg}^{-1}$
Frost resistance, method E Number of cycles carried out without defects Level	6	150 Level 3	≥ 150 ' Level 3 ≥ 90 and < 150 ' Level 2 ≥ 30 and < 90 ' Level 1
Individual dimensions: Length Average tolerance Minimum tolerance Maximum tolerance	10	- 0.1 % 0.0 % - 0.3 %	$L_T \leq \pm 2.0 \%$
Individual dimensions: Width Average tolerance Minimum tolerance Maximum tolerance	10	- 0.1 % 0.0 % - 0.4 %	$I_T \leq \pm 2.0 \%$
Camber Average camber Minimum camber Maximum camber	10	0.3 % 0.1 % 0.5 %	$\bar{R}_L \leq 1.5 \%$
Twist Average twist Minimum twist Maximum twist	10	0.3 % 0.1 % 0.5 %	$C_p \leq 1.5 \%$