

CertiMaC  
soc. cons. a r.l.  
Via Granarolo, 62  
48018 Faenza RA  
Italia  
tel +39 0546 670363  
fax +39 0546 670399  
www.certimac.it  
info@certimac.it

R.I.RA,  
partita iva e  
codice fiscale  
02200460398  
R.E.A.RA  
180280  
capitale sociale  
€ 60.000  
interamente versato

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° 010114 - R - 2387  
annexed to this  
Certificate of Conformity

# CERTIFICATE OF CONFORMITY

*N. 029/11*

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 Copporeale**

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 C

First Issue 04/16/1998

Eng. Martino Labanti

Current Issue 03/02/2011

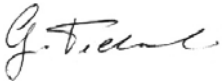


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**Tests executed by**

Ind. Tech. Germano Pederzoli



Ind. Tech. Federica Farina



**Drawn up**

Dr. Marco Marsigli



**Approved**

Eng. Martino Labanti



# TEST REPORT

**010114 - R - 2387**

ANNEX TO THE CERTIFICATE OF CONFORMITY 029/11

PLACE AND DATE OF ISSUE: Faenza, 03/02/2011

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

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

TYPE OF PRODUCT: **Tegola Copporeale**  
(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	422 mm
WIDTH	256 mm
CAMBER	0.0 mm
FIXING	Yes

SAMPLING DATE: 12/10/2010

TESTS EXECUTED: February-March 2011


TESTS EXECUTED AT: CertiMaC, Faenza

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Test	N. specimens	Results	Acceptance limits
<b>Appearance and structure</b> N. unsatisfactory specimens	100	0	$\leq 5$
<b>Flexural strength</b> Minimum breaking load Average breaking load Maximum breaking load Standard deviation	10	5.13 kN 6.21 kN 7.01 kN 0.67 kN	$F \geq 1.20 \text{ kN}$
<b>Impermeability</b> Maximum impermeability Average impermeability  Category of impermeability	10	0.06 cm <sup>3</sup> cm <sup>-2</sup> gg <sup>-1</sup> 0.05 cm <sup>3</sup> cm <sup>-2</sup> gg <sup>-1</sup>  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> $IF \leq 0.90 \text{ cm}^3 \text{ cm}^{-2} \text{ gg}^{-1}$ $\bar{IF} \leq 0.80 \text{ cm}^3 \text{ cm}^{-2} \text{ gg}^{-1}$
<b>Frost resistance, method C</b> Appearance and structure Mass loss	10	satisfactory 0.0 %	satisfactory/unsatisfactory $\Delta M \leq 1.0 \%$
<b>Individual dimensions: Length</b> Average tolerance Minimum tolerance Maximum tolerance	10	- 0.6 % - 0.4 % - 0.8 %	$L_T \leq \pm 2.0 \%$
<b>Individual dimensions: Width</b> Average tolerance Minimum tolerance Maximum tolerance	10	- 0.8 % - 0.3 % - 1.3 %	$I_T \leq \pm 2.0 \%$
<b>Camber</b> Average camber Minimum camber Maximum camber	10	0.3 % 0.1 % 0.6 %	$\bar{R}_L \leq 1.5 \%$
<b>Twist</b> Average twist Minimum twist Maximum twist	10	0.4 % 0.0 % 0.9 %	$C_p \leq 1.5 \%$