

## WHAT IS KING KLINKER?

King Klinker is one of the most advanced thin brick producers in the world.

Founded in 1972, King Klinker built a state of the art thin brick facility in 2013. This new facility is able to manufacture 70,000,000 thin bricks per year with innovative modern designs, colors and textures at quality standards that exceed that of Europe and America.

- King Klinker produces real thin brick through a natural method called extrusion.
- The new advanced production line allows King Klinker to fire thin brick at 1250° C.
- King Klinker can be produced in extraordinary colors, formats and textures.
- King Klinker exceeds the quality standards of Europe and America.

## WATER ABSORPTION AND EFFLORESCENCE

- **ASTM C1088 certified for water absorption.** Less than ~3% water absorption in cold and boiling water submersion.
- No efflorescence detected
- ASTM 216 plant qualified to pass well within size and warpage requirements.
- Pending PCI Compliance

### PHYSICAL PROPERTIES

- Frost resistance: resistant to freeze/thaw conditions
- Thermal shock: resistant to rapid changes in temperature
- Breaking force: greater than 800 N, as read from the pressure gage, necessary to cause the brick to break
- Bending Strength: minimum of 13N/mm<sup>2</sup> of stress in the thin brick just before it yields in a flexure test

# DECLARED PRODUCT PROPERTIES MANUFACTURED BY KLINKIER PRZYSUCHA S.A.

Physical properties	GLAZED PRODUCTS	UNGLAZED PRODUCTS
Frost resistance to PN –EN ISO 10545-12	Resistant	Resistant
Thermal shock to PN –EN ISO 10545-9	Resistant	Resistant
Breaking force to PN-EN ISO 10545-4	≥ 800 N	≥ 800 N
Bending strength to PN-EN ISO 10545-4	Minimum 13N/mm <sup>2</sup>	Minimum 13N/mm <sup>2</sup>





### TEST REPORT

04/22/2019

King Klinker 501 Eagle Court Onalaska , WI 54650 608-406-9723

King Klinker Report Number: 8808-20651 Received Date: 04/09/2019 Sampled Date:

04/09/2019

\*Temperature: 60 - 90F

\*Humidity: 30% - 70%

Name:

Phone:

Product Code:

Lot:

Sample Description: Brown

							Test Date
Absorption	1	2	3	4	5	Average	
24 Hour Submersion in Cold Water (%)	2.77	3.41	3.44	3.35	3.13	3.22	04/11/2019
5 Hour Submersion in Bolling Water (%)	2.95	3.72	3.67	3.53	3.38	3.45	
Saturation Coefficient (Ratio of 24H to 5H)	0.94	0.92	0.93	0.95	0.93	0.93	
Efflorescence	11	12	13	14	15		
	Not Effloresced	Not Efforesced	Not Efforesced	Not Efforesced	Not Effloresced		04/22/2019

The brick represented by the test results shown here comply with the physical property requirements of the standards listed below: ASTM C 1088 - 18 Standard Specification for thin Veneer brick Units Made From Clay or Shale Grade: Exterior, Interior, with absorption alternate in section 6.1.2

"The temperature and humidity of the Bishop Materials Laboratory is constantly kept between 60 -90F, and 30-70% RH The results shown above apply only to the samples tested, which are provided by the customer. This test report shall not be reproduced except in full, without written approval of the laboratory.

Lab Reference: 8808.20651

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# Resistant to hairline cracking and webbing

## **DECLARED PRODUCT PROPERTIES** MANUFACTURED BY KLINKIER PRZYSUCHA S.A.

Crazing Resistance	GLAZED PRODUCTS	UNGLAZED PRODUCTS
Crazing resistance to PN –EN ISO 10545-11	Resistant	

# **CHEMICAL RESISTANCE**

# Passed chemical resistance to domestic cleaning agents

# DECLARED PRODUCT PROPERTIES MANUFACTURED BY KLINKIER PRZYSUCHA S.A.

Chemical Resistance to PN -EN ISO 10545-13		
Agents of domestic use	class GA	class UA
- Hydrochloric acid - 3%	class GLA	class ULA*
- Citric acid - 10%	class GLA	class ULA
- Potassium hydroxide - 3%	class GLA	class ULA
Shape and dimensions	Consistent with exclusion of curvature in the middle of surface	Consistent with exclusion of curvature in the middle of surface

<sup>\*</sup> For engobe products the declared ULC class