

Certificate of shape stability

1. Ref. transp. packaging unit:	Wienerberger 1140x1140 POT Tile451 432pcs	
2. Ref. measuring report:	Wienerberger nv	- 20190228003
3. Company:	Wienerberger nv	
4. Performed test:	Acceleration test according to: Be RD of April 27th 2007, EUMOS 40509,	
5. Date:	28/02/2019	EN12195-1:2010

6. Description of the tested transport packaging unit

Description:

A wooden 1140x1140 pallet containing 3 layers of tiles. Every layer contains 4 rows of 36 tiles. Each row is divided in 4 bundles of 9 tiles. The 9 tiles are bundled with one vertical strap. The 4 x 9 pcs are bundled with one horizontal strap as well. PE interlayers are used in between the layers. The same interlayers are used as dividers between the different rows per layer.

Primary packaging: / Secondary packaging: /

Tertiary packaging: Stretch film: Stretch hood: Shrink hood: Straps:

Add transport packaging: PE interlayers, 9mm straps

Anti slip up the pallet:

Anti slip up on layer(s):

Stacking pattern: Columnar

Pallet type: 1140x1140 # Layers: 3

Height [mm]: 1195 Weight[kg]: 1050

Length - LP [mm]: 1140

Width - BP [mm]: 1140



7. Name and signature responsible of the packaging:

8. Test conditions: Relative humidity: 50% - Temperature: 20°C - Sliding of the pallet is prevented mechanically.

9. Picture in the BP-direction after the test. Picture in the LP-direction after the test.



10. Conclusions:

The tested load unit is shape stable in the BP-direction at 0.5g under the specified test conditions.

The tested load unit is shape stable in the LP-direction at 0.5g under the specified test conditions.



11. Name and signature responsible of the test: Ing. J. Dendauw



**TEST REPORT of the
ACCELERATION TEST
based on RD of April
27th 2007,
EN12195:2010,
EUMOS 40509**

Ref. transp. packaging unit: Wienerberger 1140x1140 POT Tile451 432pcs

Ref. measuring report: Wienerberger nv - 20190228003

Specifications of the test

Client

Company: Wienerberger nv
Address: Kapel Ter Bede 121
8500 Kortrijk
België
Contact pers.: Kristof Decroos
Tel. nr.: +32 (0) 56 43 93 29
Fax nr.:
Mob. nr.: +32 (0) 477 75 57 39
E-mail: Kristof.Decroos@wienerberger.com

Test details:

Test facility: ESTL nv, wafelstraat 45, 8540 Deerlijk, België
Test responsible: Ing. Jelle Dendauw
Test equipment: MJ1500 acceleration bench
Test date: 28/02/2019
People attending: Jelle Dendauw (ESTL), Kristof Decroos (Wienerberger)

Temperature [°C]: 20
Rel. humidity [%]: 50
Load conditions: Sliding of the load unit is prevented mechanically.
Attached documents to the report: /

Goal of the acceleration test

According to the Belgian RD* of April 27th 2007, EUMOS 40509 and the EN12195:2010, a load securing layout has to be capable of withstanding certain forces of inertia. These forces amount to 0,8g in forward direction, 0,5g in rearward direction and 0,5g in the sideward directions. The acceleration test allows for an unambiguous assessment of a certain load unit, secured in a specified manner, with the rules and regulations of the Belgian RD.

A load unit is placed on a platform and is secured in the correct orientation and according to a specified securing layout. The platform is then accelerated at 0,8g or 0,5g to imitate the influence of the forces of inertia originating from the forward deceleration as prescribed in abovementioned RD. The stability of the load unit is then assessed. If the load unit is deemed stable, it is rotated 90 degrees, together with the securing layout. Next, the platform is accelerated at 0,5g to imitate the influence of the forces of inertia originating from the sideward acceleration prescribed in abovementioned RD. After this test the stability of the load unit is assessed once again.

Reference 20190228/003
Company: Wienerberger nv

Author Dendauw Jelle Contact: Kristof Decroos
Pallet name: Wienerberger 1140x1140 POT Tile451 432pcs

Date: 28/02/2019

Conclusions



Acceleration: 0,5 Direction: LP **The pallet is shape stable?**

Before	After	Result
-8	-8	0



Before	After	Result
-4,5	-5,5	1


Before	After	Result
-4	-4	0

Deformation:     

The LP-direction is behaving shape stable at 0,5g in the LP-direction.



Acceleration: 0,5 Direction: BP **The pallet is shape stable?**

Before	After	Result
-4,5	-4	0,5



Before	After	Result
-2,5	-3,5	1

Before	After	Result
-7	-7	0

Deformation:     

The pallet is behaving shape stable at 0,5g in the BP-direction following EUMOS40509.

Reference 20190228/003
Company: Wienerberger nv

Author Dendauw Jelle

Contact: Kristof Decroos

Date: 28/02/2019

Pallet name: Wienerberger 1140x1140 POT Tile451 432pcs

General remarks and conclusions

Conclusions:

- The pallet is behaving shape stable at 0,5g in the BP-direction following EUMOS 40509.
- The pallet is behaving shape stable at 0,5g in the LP-direction following EUMOS 40509.

Remark:

- The pallet has been wrapped with stretch film. 19 revolutions of a 17µm film were applied to the pallet prior to hooding. The total stretch film consumption is about 225 gram.

Hood specifications

Hood reference: Barbier Stretch hood

Thickness [µm]: 120

Hood Type: Stretch hood

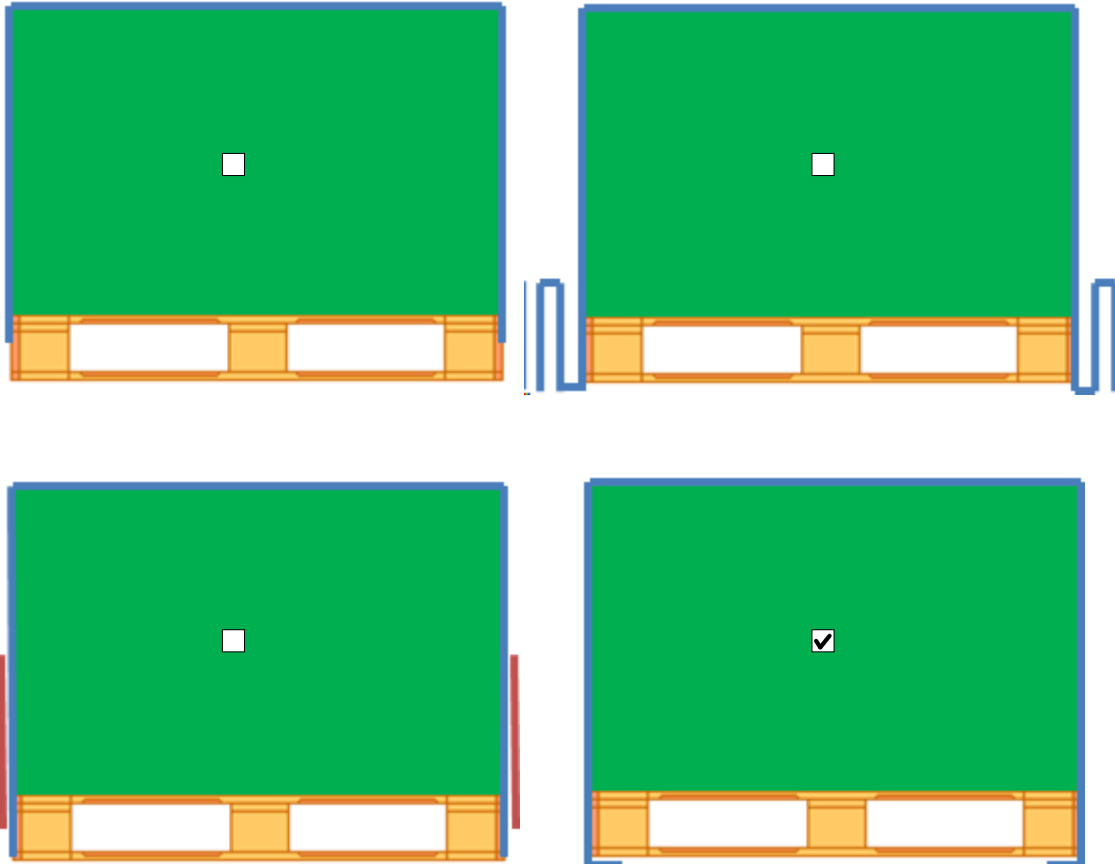
Initial dimensions [mm]x[mm]: 880x 750

Vertical stretch [%]:

Hor. stretch long side [%]:

Hor. stretch short side [%]:

Configuration of the hood:




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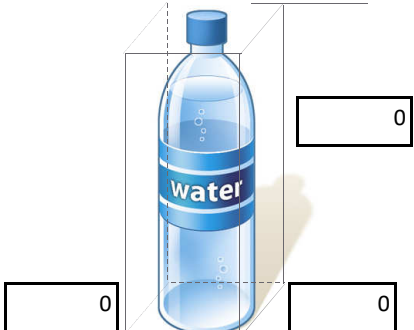
Pallet specifications

Name of the pallet: Wienerberger 1140x1140 POT Tile451 432pcs	
<p>A wooden 1140x1140 pallet containing 3 layers of tiles. Every layer contains 4 rows of 36 tiles. Each row is divided in 4 bundles of 9 tiles. The 9 tiles are bundled with one vertical strap. The 4 x 9 pcs are bundled with one horizontal strap as well. PE interlayers are used in between the layers. The same interlayers are used as dividers between the different rows per layer.</p>	
<p>Pallet type: 1140x1140 Stacking pattern: Columnar # Layers: 3 Cases per layer: <input type="text"/></p>	
<p>Tie sheet between load and pallet: <input type="checkbox"/> Tie sheet on top of layer(s): <input type="checkbox"/></p>	
<p>LP [mm]: 1140 BP[mm]: 1140 Weight [kg]: 1050 Height [mm]: 1195</p>	

Primary packaging

Name.: /

Type:



Secondary packaging

Name: /

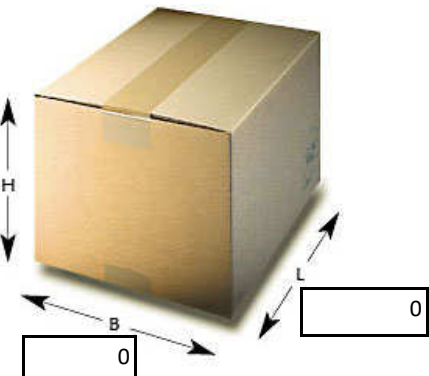
Theor. head space [mm]: 0

Gross weight [kg]: 0

Compression force [N]: 0

Fluting type:

Prim units per sec. unit: 0



Additional packaging

PE interlayers, 9mm straps