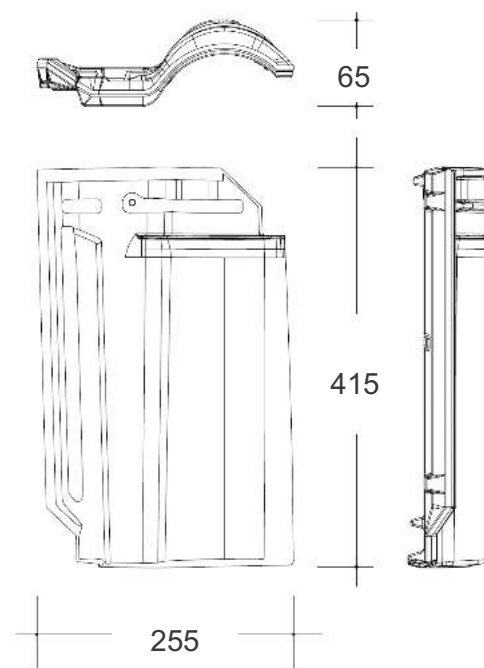


Portoghese

The Portoghese tile is a great classic. The shape resembles the combination of a flat Roman tile and a bent tile in one single element. The wide range of colours allows to fulfill the needs of the modern architecture as well as of the most traditional roofs. Light and easy to lay.

TECHNICAL DATA	UM	
Dimension	mm	415(L) x 255(W)
Weight	kg	3,0
Batten gauge	mm	345
Mechanical strength	daN	> 120
External fire resistance		B _{roof}
Reaction to fire		A1
Covering capacity	pcs/sqm	ca. 14
Minimum pitch		30% (16,7°)
Packaging	pcs/pallet	180/204 (domestic pack.) 272 (export pack.)
SRI (Solar Reflectance Index)		Natural red: 48 Antica monferrato: 42 Antica cassino: 47 Vecchia etruria: 47 Antica naxos: 53 Dark brown: 25 Red rubin dark: 28



Dimensions in millimeters

Braas clay roof tiles satisfy the requirements of the **UNI EN 1304** reference norm and the test methods for the following characteristics:

- Impermeability
- Frost resistance
- Mechanical resistance

The conformity with the UNI EN 1304 standard is guaranteed by the CE marking.

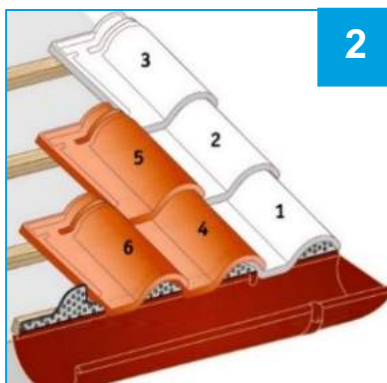
Braas roof tiles are tested according to UNI EN 539/2 and pass the test after 400 freeze-thaw cycles (the norm requires 90 cycles for Italy and 150 cycles for the northern European countries). This performance ensures the durability even with harsh climate conditions.

Installation Instructions

1. The roof tiles must be installed on battens or proper support (min. batten size 40 x 40 mm)
2. The roof tiles must be installed with straight bonds (aligned joints)
3. The installation of roof tiles at a roof pitch < 30% is not possible
4. Use of waterproofing underlay is always necessary (see below)

Roof pitch				Installation instructions	
Degrees		%		Waterproofing layer	Batten Distance
from	to	from	to		
	≥ 30,6°		≥ 60	A waterproofing underlay is always recommended to avoid leakages in case of adverse climate conditions.	Recommended batten gauge: 345 mm Recommended batten section: 40 mm x 40 mm
24,1°	30,6°	45	60		
19,3°	24,1°	35	45		
16,7°	19,3°	30	35		
< 16,7°		< 30		not possible	

Sequence of Installation



source: A.N.D.I.L

Colour Range



Portoghese natural red



Portoghese antica monferrato



Portoghese antica cassino



Portoghese corte a sera



Portoghese castelli romani



Portoghese rossovivo



Portoghese dark red rubin



Portoghese bright green



Portoghese dark brown



Portoghese ardesia