

## Instructions for Use

# Fonterra Base screed additive Flat 12



for cement heating screed as special construction, improvement of heat conductivity, the bending tensile as well as the pressure resistance, Fonterra PB-pipe d12x1.3 mm

**Model**  
1456

**Year built (from)**  
01/2012

**viega**

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# 1 About these instructions for use

Trade mark rights exist for this document, further information can be found at [viega.com/legal](http://viega.com/legal).

## 1.1 Target groups

The information in this instruction manual is directed at the following groups of people:

- Heating and sanitary professionals and trained personnel
- Screed installer

It is not permitted for individuals without the abovementioned training or qualification to mount, install and, if required, service this product. This restriction does not extend to possible operating instructions.

The use of Viega products must be carried out in accordance with the general rules of engineering and the Viega instructions for use.

## 1.2 Other applicable documents

- Safety data sheet Fonterra base screed additive Flat 12 in acc. with 1907/2006/EU

*To see the safety data sheet, go to [www.viega.com](http://www.viega.com) in the online catalogue for this product.*

## 1.3 Labelling of notes

Warning and advisory texts are set aside from the remainder of the text and are labelled with the relevant pictographs.



### **DANGER!**

This symbol warns against possible life-threatening injury.



### **WARNING!**

This symbol warns against possible serious injury.



### **CAUTION!**

This symbol warns against possible injury.

**NOTICE!**

This symbol warns against possible damage to property.



Notes give you additional helpful tips.

## 1.4 About this translated version

This instruction for use contains important information about the choice of product or system, assembly and commissioning as well as intended use and, if required, maintenance measures. The information about the products, their properties and application technology are based on the current standards in Europe (e. g. EN) and/or in Germany (e. g. DIN/DVGW).

Some passages in the text may refer to technical codes in Europe/ Germany. These should serve as recommendations in the absence of corresponding national regulations. The pertinent national laws, standards, regulations and guidelines, as well as other technical guidelines, have priority over German/European guidelines in this manual: The information is not binding for other countries and territories and should, as mentioned, be considered as support.

## 2 Product information

### 2.1 Safety advice



**DANGER!**  
**Causes skin irritation and severe damage to the eyes**

Avoid contact with the eyes and skin.

- In case of contact with eyes, rinse thoroughly for a number of minutes.
- If possible, remove contact lenses, if worn.
- If necessary, contact a doctor.



**DANGER!**  
**Risk to health**

Keep out of the reach of children.



**NOTICE!**

Observe the normal safety measures when dealing with chemicals.

- Protect yourself with working clothes and gloves.
- Wear eye protection and a face mask.

### 2.2 Intended use

The screed additive Fonterra Base Flat 12 is an accelerant, hardening additive for dimensionally stable, high-quality and optimised heating screed with low tension and distortion hardening. Use the Fonterra Base Flat 12 screed additive for example during refurbishment of residential buildings to reach minimum coverage.

The screed hardnesses are mainly dependent on the proper mortar mixture, the technically correct laying and the quality of subsequent treatment.

## 2.3 Features and mode of operation

Fonterra Base Flat 12 screed additives act as liquefiers and stabilizers. Due to this, the amount of added water can be reduced to a W/C value of ~ 0.45–0.50.

The screed is laid whilst of a plastic consistency. Processing is improved greatly and a so-called "bleeding" of the screed is prevented due to the stabilising, water-retaining features. A homogenous structure and a very good pipe coating are achieved due to the easy processing and thickening. The accelerant components speed the screed curing process up so that readiness for covering is achieved sooner.

Depending on the environmental influences (temperature and humidity), the surface can already be walked upon after 36–48 hours. The significant increase of strength attributable to the addition of Fonterra Base Flat 12 screed additive allows you to reduce the thickness of the studs coverage to 15 mm while complying with the recipe.

## 2.4 Technical data

Consumption	700 g/m <sup>2</sup> at 15 mm snap coverage, max. load capacity 2 kN/m <sup>2</sup>
Hardening time	5 days
Can be walked upon after	2 days

## 3 Handling

### 3.1 Transport and storage

Observe the following with transport and storage:

- Can be stored up to 18 months in the original packaging when dry.
- Do not place in direct sunlight.
- Protect the packaging from damage.
- Delivery form: 12 kg PE sack

### 3.2 Processing



#### **CAUTION!** **Risk of chemical burns due to irritants**

Product may cause chemical burns in case of contact with skin and mucous membranes.

- Wear protective gloves.
- Do not inhale the dust.
- Rinse thoroughly if contact is made with mucous membranes.
- Before start of work, apply oil-free cream to your hands, and use rich skin protection cream on your hands after the end of work.

Mixture, manufacture and processing of the screed takes place in accordance with the relevant standards, specifications and industrial rules, especially DIN EN 13813, DIN 18353, DIN 18560, DIN 1264-4 as well as trade information *'Interface coordination with floor constructions'*, Central Association Sanitary Heating and Air-conditioning with heated floor constructions, St. Augustin and the data sheets published by the ZDB in connection with heated floor constructions as well as our product instructions.

#### **Particularly important notes**

Do not add any additional additives or binding agents.

Optimal conditions for hardening and drying are achieved at temperatures of 20 °C and a relative humidity of  $\geq 65\%$ . The temperatures of the room, the underground and the basic materials must not fall below 5 °C. Particularly in case of material and component temperatures of 25 °C and up, faster setting must be anticipated. If necessary, take appropriate measures. Take the dewpoint into consideration.

Dry, closed, and draft-free rooms are the precondition for drying without deformation. Protect freshly applied surfaces from drafts, solar radiation and heat. Ensure even air change during drying.

Comply with the BEB protocol *"Building climate control preconditions regarding the drying of floor screeds"* on functional heating.



#### NOTICE!

Pay attention to the handling and smoothing times. They are somewhat shorter than for conventional cement screeds. For this reason, place the mortar within approx. 30 to 45 minutes (depending on the material and the room climate). Compact, spread, rub off and smooth the mortar in accordance with professional standards.



#### NOTICE!

Be sure to provide a minimum coverage of at least 15 mm over the studs of the Fonterra Base snap plate. The coverage must not fall below this minimum.

## 3.3 Guide mixture

### Dosage

When producing the fresh mortar, add the Fonterra Base Flat 12 additive directly to the cement in a quantity of 7–8 percent by weight (in relation to the cement weight). Mixture 1 should be used to produce a thin-layered and almost distortion-free, low-shrink, quickly walk-on-able, heating screed. Alternatively, mixture 2 can also be used.



#### NOTICE!

We recommend protecting the hands (with skin cream containing fat or protective gloves) in accordance with the pertinent health and safety regulations.

### Mixture 1

#### Raw materials

Cement	CEM I 42.5 N/R (EN 197-1)
Aggregate	0/8 mm, wire line A/B f <sub>3</sub> (DIN 1045 / EN 206-1)
Water	Mains water
Additive	Fonterra Base Flat 12 screed additive



Dosage for CT-C40/45-F $\geq$ 6/7:	7–8 % of the cement weight approx. 0.225–0.250 kg per cm/m <sup>2</sup> screed
Mixing ratio	Cement content: approx. 310–330 kg/m <sup>3</sup> Aggregate: approx. 1650–1700 kg/m <sup>3</sup> Cement (aggregate mixture): approx. 1:4.8 to 1:5 (quantity ratio)

#### Order of dosage (addition in 200 l pull supply mixer)

Aggregate 0/8	approx. 1/3 to 1/2
Cement CEM I 42.5 R	2 1/2 sacks (62.5 kg)
Fonterra Base Flat 12 screed additive	5 l (approx. 4 kg)
Mixing water	approx. 10 l
Aggregate 0/8	remaining part
Mixing water (depending on the wetness of the supplement)	5–14 l
Mortar consistency	plastic

## Mixture 2

#### Raw materials

Cement	CEM I 32.5 R ( EN 197-1)
Aggregate	0/8 mm, wire line A/B f <sub>3</sub> (DIN 1045 / EN 206-1)
Water	Mains water
Aggregate mixture	rough aggregate, 2/5 mm split
Additive	Fonterra Base Flat 12 screed additive
Dosage for CT-C40/45-F $\geq$ 6/7:	7–8 % of the cement weight approx. 0.225–0.250 kg per cm/m <sup>2</sup> screed
Mixing ratio	Cement content: approx. 320–330 kg/m <sup>3</sup> Aggregate: approx. 1650–1700 kg/m <sup>3</sup> Cement (aggregate mixture): approx. 1:4.8 (quantity ratio)

#### Order of dosage (addition in 200 l pull supply mixer)

Aggregate 0/8	approx. 1/3 to 1/2
Cement CEM I 32.5 R	2 1/2 sacks (62.5 kg)
Fonterra Base Flat 12 screed additive	5 l (approx. 4 kg)

Mixing water	approx. 10 l
2/5-mm split	approx. 10-20 %
Aggregate 0/8	remaining part
Mixing water (depending on the individual wetness of the supplement)	5-14 l
Mortar consistency	plastic



You can agree other mixtures with the factory in Attendorf.

## 3.4 Disposal

Separate the product and packaging materials (e. g. paper, metal, plastic or non-ferrous metals) and dispose of in accordance with valid national legal requirements.

Do not dispose of the product in household rubbish.

Set material can be disposed of as construction waste in compliance with waste code number AVW 170101.

Entirely empty and clean packaging can be recycled. Contaminated packaging must be disposed of in the same way as the product.



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