



# RootmaXX

Stone wool propagation cube for professional vegetable growing

#### **Product description**

Cultilene RootmaXX is a stone wool propagation cube, mainly made of basalt and made with the X-fiber technology. Instead of the usual horizontal or vertical fibre orientation, the fibres using this technique are orientated in all directions throughout the substrate. In this way, two advantages are combined: a rapid root development supplied by a vertically oriented fibre structure and a better root volume throughout the substrate supplied by a horizontally oriented fibre structure.

# **Product application**

Cultilene RootmaXX cubes are used for growing vegetable crops under glass or plastic.

#### Guarantee

The guaranteed lifespan of the stone wool substrate and foil is one crop if used under normal growing conditions in high tech greenhouses. RootmaXX is produced under RHP certification. The RHP certificate is a quality agreement between the stone wool suppliers and the Dutch trade association for the plant reproduction material sector. The KIWA certification agency regulates this certification scheme. Further information can be found at the RHP website: www.rhp.nl

# Why choose Cultilene RootmaXX?

- 5% more roots, 20% less visible roots
- Roots stay higher in the cube
- Less root damage



#### **Product characteristics**

The RootmaXX cube is just one of the solutions from Cultilene for plant propagation. This controllable water buffer has the following characteristics:

Parameter	
Time required to sink	Class 1 RHP < 25 sec
Nominal water content - at drainage	90%
Nominal water content - pF1	65%
Control range *	45 - 55%

<sup>\*</sup> Indication of average values in practice.

The RHP standard applies to the minimum values.

#### **Technical details**

# **Physical requirements**

Parameter	
Organic matter	1,0 - 4,5%
Bulk density at delivery *	72 kg/m³ *
Relative compression (RC)	≤ 30% at 5 kPa
Recovery capacity	≥ 98% +/- 2% at 5 kPa
Pore volume	≥ 95%

<sup>\*</sup> The specific weight of the base material is 72 kg / m3. Note: for the correct calculation of the density of the cube, the volume of the processed cube must be taken into account with regard to tolerances during processing. For specifications of tolerances we refer to RHP MOD 550.

# **Chemical requirements**

Parameter	Norms
EC	≤ 0,5 dS/m
pH value in stone wool	5 - 6,5

#### **Substrate tolerances**

The following tolerances apply to the nominal dimensions of the final product (dry product):

Dimensions of cube	
Length	+ / - 2 mm
Width	+ / - 2 mm
Height	+ / - 2 mm
Plug and plant holes	
Diameter	+ / - 3 mm
Depth	+ / - 5 mm
Positioning	+ / - 5 mm
Grooves	
Depth 7 mm	+ / - 3 mm
Width 12 mm	+ / - 3 mm
Positioning	+ / - 5 mm

## **Standard product dimensions**

The most commonly used dimensions for RootmaXX cubes are:

- > 100 x 100 x 65 mm
- > 150 x 100 x 65 mm
- > 200 x 100 x 65 mm
- ▶ 100 x 100 x 75 mm
- > 150 x 100 x 75 mm

Alternative sizes are available on request.

The RootmaXX cube is provided with plug and plant holes and grooves. After production and processing, the cubes are stacked on pallets and prepared for transport.



## **Characteristics RootmaXX**

***	Reactivity Control speed, controllability of the cube
****	Refreshment Refreshment rate for water, nutrition and oxygen
***	Resaturation Ease with which the cube can be resaturated with water
***	Rooting to substrate slab  Speed with which the plant attaches itself to the slab

Firmnes

Mechanical processibility based



#### **Packaging and storage**

RootmaXX cubes are delivered in standard packaging on standard pallets (1200 x 1000 mm). Different pallet sizes are available on request.

Each pallet has a pallet label with information such as the production order number, item number, product description and product characteristics.



The pallets must be stored (indoors) in their original packaging in a dry place an away from direct sunlight. The products must be used within two years of the delivery date. Pallets must be stacked no more than 4 high, and we would like to emphasise that the safety rules that apply to stacking pallets must be observed. Ensure the prevention of damage to the packaging material.

#### **User instructions**

#### Initial wetting

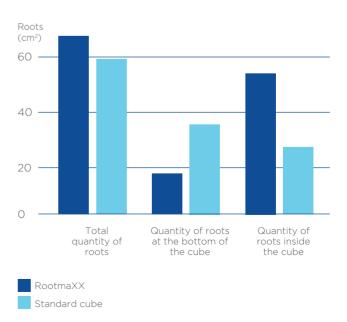
In this phase, the cubes are completely saturated with water. This can be done in three different ways: on the production line before sowing or transplanting, with an ebb and flood system, or by watering with overhead sprinklers.

#### Handling

Lowering the cubes, and, at a later stage, separating them. The RootmaXX cube is suitable for moving at least twice. Make sure that the grooves under the RootmaXX cube are placed perpendicular to the gutter heading to the water source.

The target level for moisture content is between 50% and 90% of the volume.

#### Root distribution of tomatoes in stone wool cube



# **Environment, health and safety concerns**

#### **Environment concerns: recycling**

Cultilene devotes a great deal of attention to the recycling of raw materials, both at our own production locations and, after use, at growers' locations. The recycled stone wool can be used, for example, in the production of bricks.

For more information about the recycling of your stone wool, you can contact your Cultilene representative.

#### **Health concerns**

If you are in direct contact with stone wool substrate, we advise you to wear gloves. In insuffi ciently ventilated spaces, we advise the use of a face mask. Wash your hands before and after handling the stone wool substrate. You can best do this by fi rst rinsing your hands with water to get rid of the dust. Then wash your hands with soap.

In case of irritation to eyes or mouth; rinse with clean water and consult a doctor if necessary.

Stone wool from Cultilene is a 'mineral wool' produced in certified EUCEB factories. EUCEB certifies the conformity of stone wool fibres with Note Q of Regulation (EC) No. 1272/2008.

#### Safety

If needed, we can supply you with the General Safety Information Sheet for Stone Wool (Safe Use Information Sheet - SUIS).

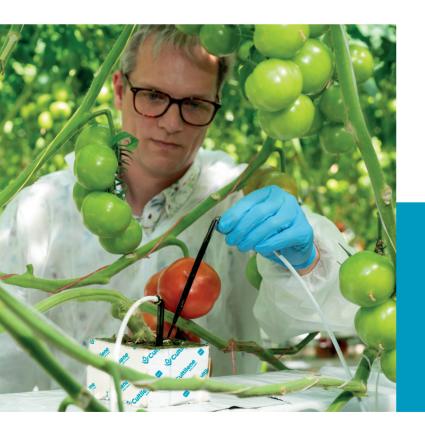
#### Certification

All Cultilene production and manufacturing sites in Europe are certified with the ISO 9001 & 14001 standards.

In addition, RootmaXX is included in the RHP certification MOD550 stone wool substrate.

#### **Knowledge**

Please refer to the Cultilene Framework for more information about the propagation and growing phases. This can be found at app.cultilene.com.



Scan the QR-code for how-to videos and white papers



Would you like more information about the **RootmaXX cubes?**Get in touch!

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