

# TopStone Cell

## Laying TopStone surface on unpaved substrates

Unpaved surfaces

Driveways

Public spaces, habitats



Drainage capability, bank reinforcement

Prevents leaching of substrate.

- TopCell system is used in surfaces where we need to achieve better stability in the ground without extensive excavation, as in case of other conventional substitutes.
- The core element of this original unique system is TopCell with different heights (50 and 75 mm) with perforation - due to the interaction with regard to the use and loading of the resulting surface.
- Specially crushed and washed stones with fraction size 4-8 mm.
- The result of TopStone surface on an unpaved surface is compressive strength 71.0 MPa (ITC test report number 412502111/01).
- Expansion gaps are placed according to specific shapes and dimensions of surfaces.

### Its application is very simple!



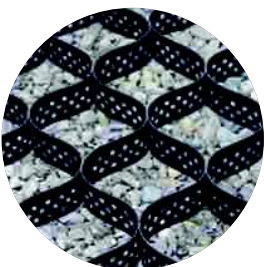
Subsoil preparation Excavation with suitable depth, the depth of the trench according to TOPSTONE normogram



Installation of geotextile - 200 g/m<sup>2</sup>  
- At least 30 cm overlap of joints is required



Laying and compaction of leveling layer 30-50 mm  
- Recommended fraction size of stones 4-8, 8-16 mm



TopCell application



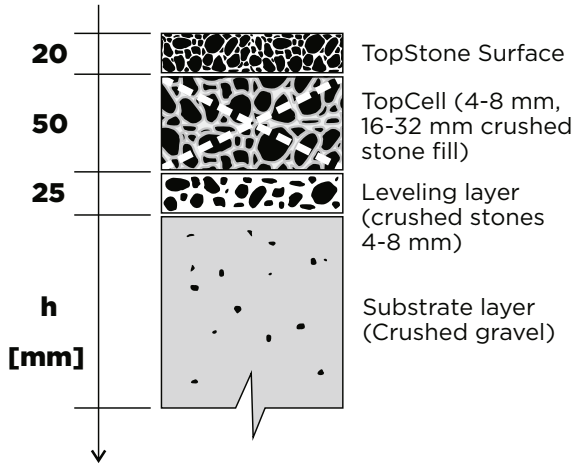
TopCell fill  
- stones 4-8, 16-32



Finished surface  
TopStone

**No surface water drainage is necessary.**

## EXAMPLE OF TOPSTONE CELL SYSTEM STRUCTURE FOR WALKING



The depth of the substrate layer is determined according to subsoil deformation modulus. Other structures TopStone Cell system are available according to the design normogram of TOPSTONE, s.r.o

## TopStone systems products:

### TopCell

Packaging - m<sup>2</sup>



### Hidden curb

curb made of recycled plastic, gray-black colour

Packaging - running meter



### Geotextile

geosynthetics in weight of 200 g/m<sup>2</sup>, gray-white colour

Packaging - m<sup>2</sup>



## TOPSTONE SURFACE DETAIL







### STRUCTURE ON COMPACTED SUBSOIL USING TOPCELL SYSTEM

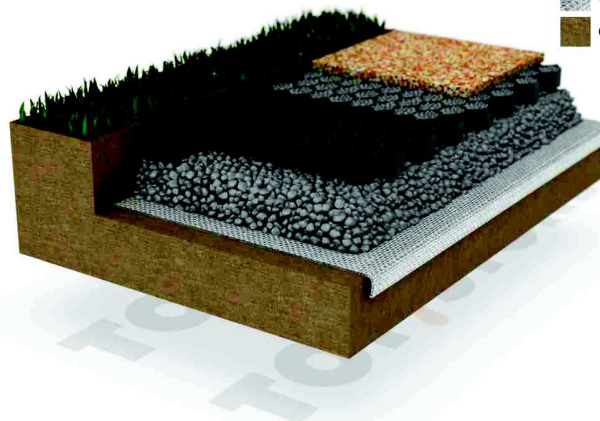
Substrate - compacted soil - crushed stone stored on geotextile, TopCell filled with crushed stones, compaction.

Structure finishing and connection to adjoining faces - hidden curb - plastic or termination of a concrete curb. It is possible to level the surface of crushed stones with a leveling layer of smaller fractions before TopCell is applied.

**The advantage** of this solution is in laying on unpaved substrates and the suitability for pedestrian and vehicle traffic.

#### LEGEND:

-  Hidden curb - plastic
-  TopStone surface
-  TopCell
-  Fill (crushed stone)
-  Compacted crushed stone
-  Geotextile (200 g / m<sup>2</sup>)
-  Compacted subsoil





**CityStone**

For the areas of civic amenities

**Exteriors - parks, sidewalks**

**Public spaces**

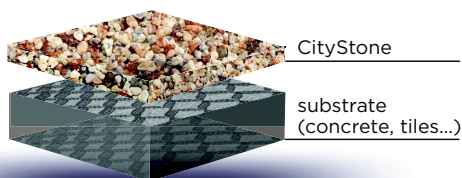
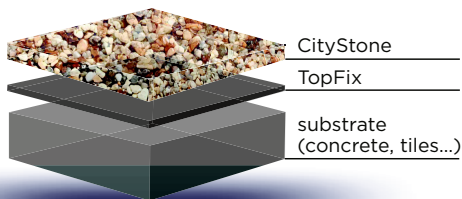
**Parks, orchards**



High drainage capability of the surface

Frost resistance, natural look

- We use CityStone system wherever there is an emphasis on a higher degree of slip resistance and drainage capability compared to other materials. This is why it is mainly used for civic amenities.
- The surface consists of river gravel with fraction size 4-8 mm with a 50% share of crushed stone with fraction size 4-8 mm, all thoroughly washed and graded.
- The variability of use is not limited, so these surfaces can be laid both on the systems for unpaved ground and on solid ground.
- High water permeability of 1852 mm/hr. (ITC test report number 412502180/02), e.g. water permeability value of low permeable soil is approx. 360 mm/h.
- Not recommended for barefoot walking.



### CityStone system products:

**EpoStone**  
unique binder

Retail pkg. 2.5 / 5 / 7.5 kg  
Wholesale pkg. 30 / 57.5 kg



**TopCell**

Packaging - m<sup>2</sup>



**The surface has anti-slip properties.**