

# all in one

Expanded clay is a high quality, durable lightweight aggregate, that has been used for over half a century.

The main characteristic of expanded clay is low density combined with high strength. In addition, the aggregate holds many other important characteristics, and it can be described as an **"all-in-one"** product, providing a huge range of properties vital for sustainable construction.

**DURABILITY**  
Expanded clay is durable  
has long lifetime and  
requires no maintenance

**ADDS STRENGTH**  
Expanded clay can reduce the weight of concrete  
by almost 50% without compromising strength

**LIGHTWEIGHT**  
It is 4-5 times lighter than loose  
gravel or loose fill crushed stone

**STRONG**  
It can be used as loose fill and insulation in road  
and rail embankments and can sustain dynamic  
loads from heavy high-speed trains

**RECYCLABLE**  
Expanded clay is 100% recyclable or reusable. There are no  
problems with disposing of demolition waste and no use of new  
materials, new resources or new energy

**RESISTANT TO FIRE**  
It is classified as a fully non-combustible material. It has no reaction to  
fire, does not emit gases or smoke and retains its mechanical resistance  
and all other thermal and physical characteristics. It is an excellent  
protection against fire



### A THERMAL INSULATING MATERIAL

Insulating performance of loose fill expanded clay is in the  
same range as the best values of wood. Concrete made with  
expanded clay can be up to 12 times more insulating than  
normal concrete: winter and summer comfort is guaranteed

### REDUCES THE NOISE

It works well for both acoustic insulation and sound  
absorption. It is suitable in the home as a wall between  
dwellings and good outside as a barrier between houses  
and noisy infrastructures

### HAS A NEVER-ENDING LIFE

Expanded clay is chemically inert, contains no harmful  
substances or gases and is completely neutral. Its resistance  
to chemical attack is comparable to that of a glazed tile,  
glass or other ceramic materials

### PROTECTS THE ENVIRONMENT

There is no dangerous leaching from expanded clay, even  
when in contact with soil, water or rain. It does not emit VOCs or  
any other dangerous substances. It is good for the environment  
and good for health

### MANAGES HEAVY RAINFALL

Quick water drainage and run-off is guaranteed thanks to  
the 40% of hollow space between the grains. This enables the  
"run off" of water in urban areas to be controlled, protecting  
the natural environment and preventing flooding

### USED FROM THE NORTH POLE TO THE EQUATOR

Unlike other materials it is not harmed by freezing temperatures. It will  
not warp, break or burst. It is widely used in Northern European countries  
exposed to extreme weather conditions

