



# Rdconnexion

SILICA PLASTIC BLOCK.





The '**Silica-plastic block**' or **SPB** is our sincere take on the enormous foundry dust emission & pollution in our Country. This was made possible by the collaboration of our firm's research wing, R+D Labs & Rhino Machines.

When it comes to manufacturing, 80% waste Silica dust is mixed with 20% plastic waste which is used as an additive to form a loam of the mixture of Silica dust and plastic. Then these are moulded into bricks, blocks & pavers.

the 'Silica-Plastic Block' project started with a clear mandate of producing zero waste from the sand reclamation plant in rhino machines foundry plant. in the initial stages, experiments were conducted by using foundry dust in cement-bonded fly ash bricks (7-10% waste recycled) and clay bricks (15% waste recycled). this experimentation also required the use of natural supplies such as cement, fertile soil and water. the amount of natural resources consumed in the process was not justified by the waste it was able to recycle. these trials led to more research by the inhouse r&d team, resulting in a possibility of bonding the sand/foundry dust with plastic. by using plastic as a bonding agent, the need for water during mixing and thereafter curing is completely eliminated. the blocks can be directly used after cooling down from molding process.



# Product



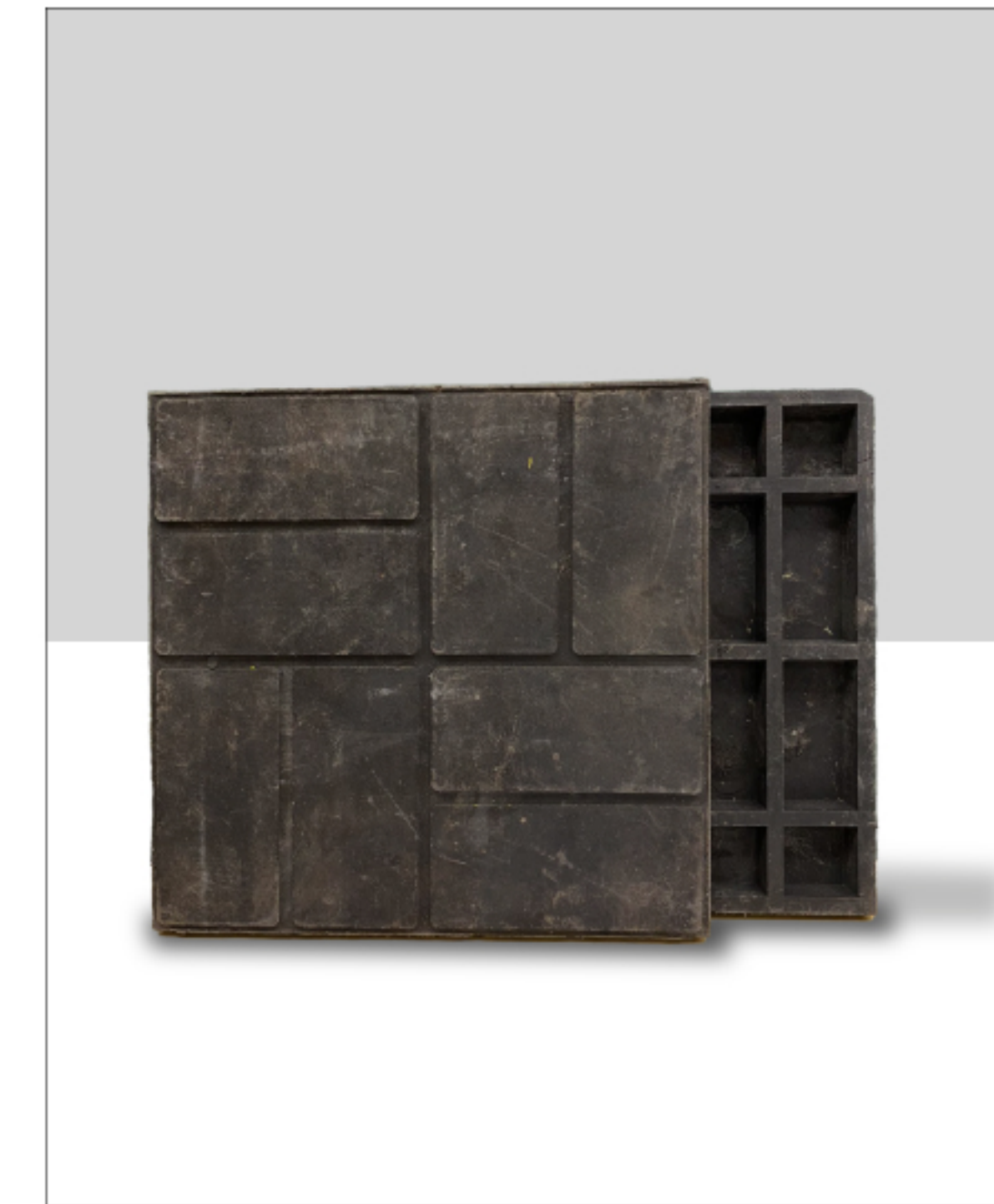
The Basic Brick



The Lego Brick

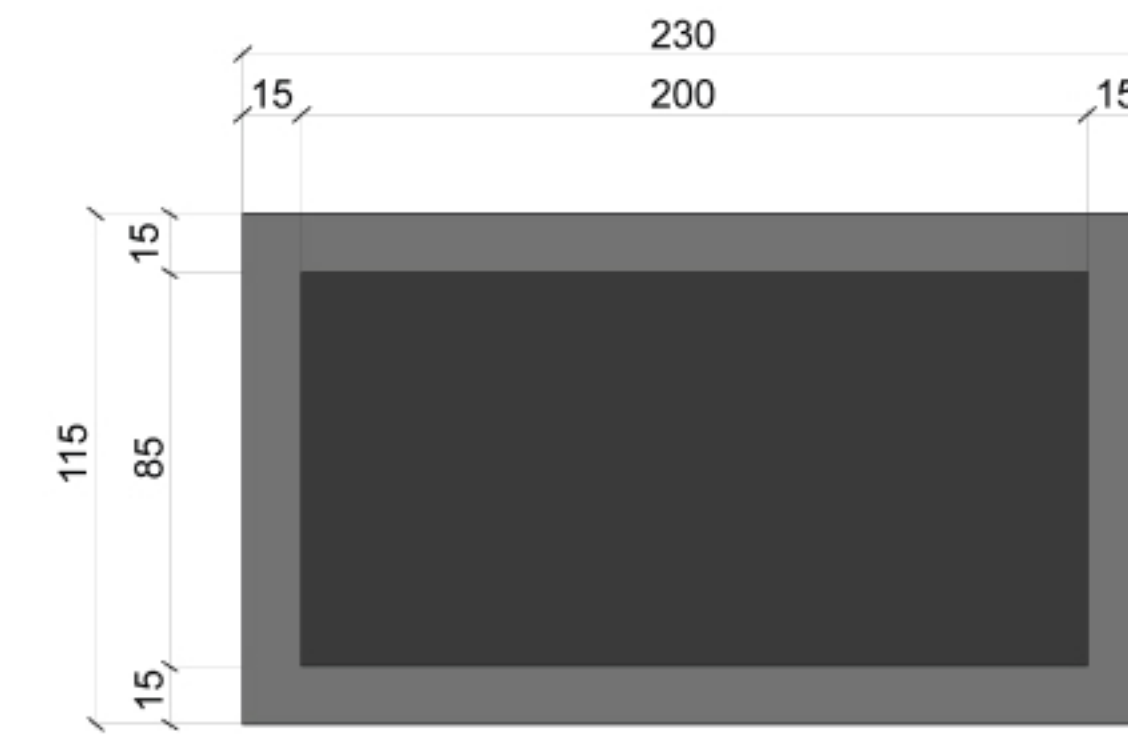


Zig-Zag Paver

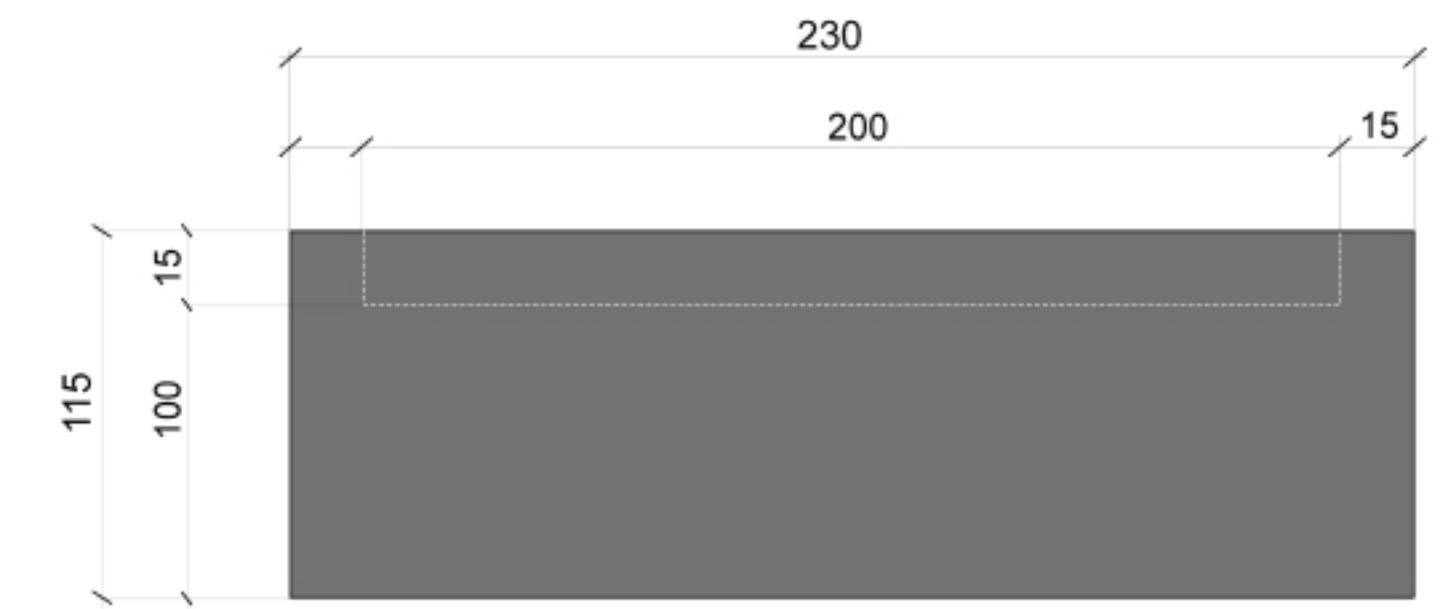


Square Paver

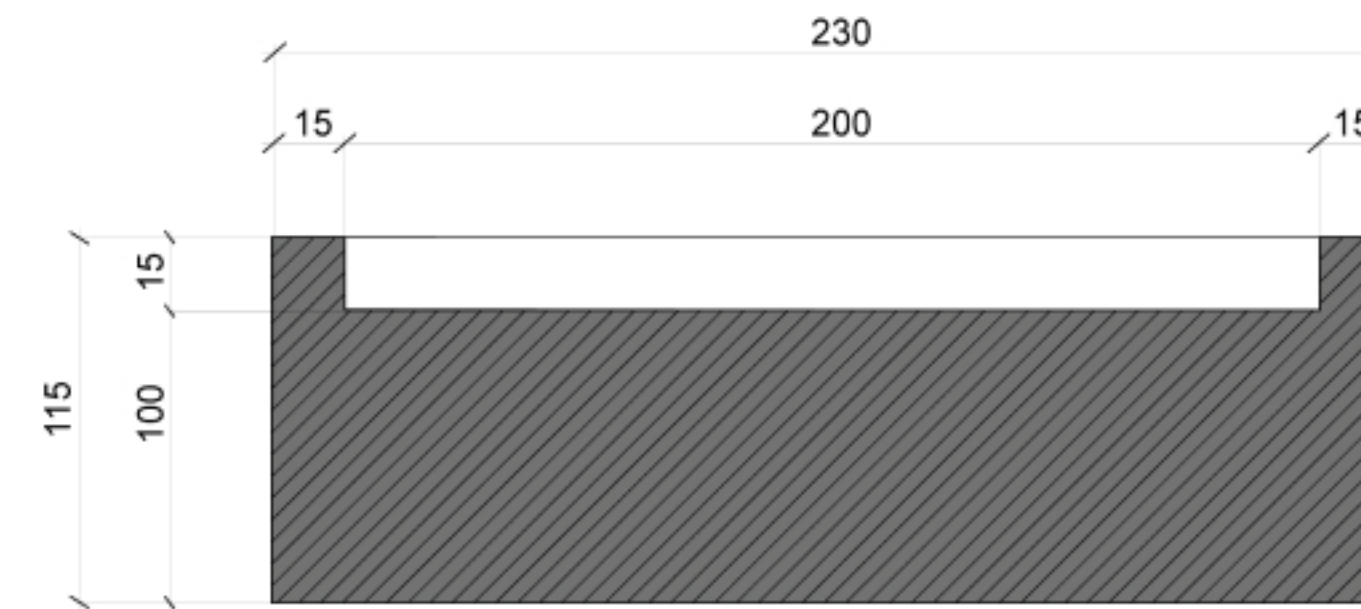
# The Basic Brick



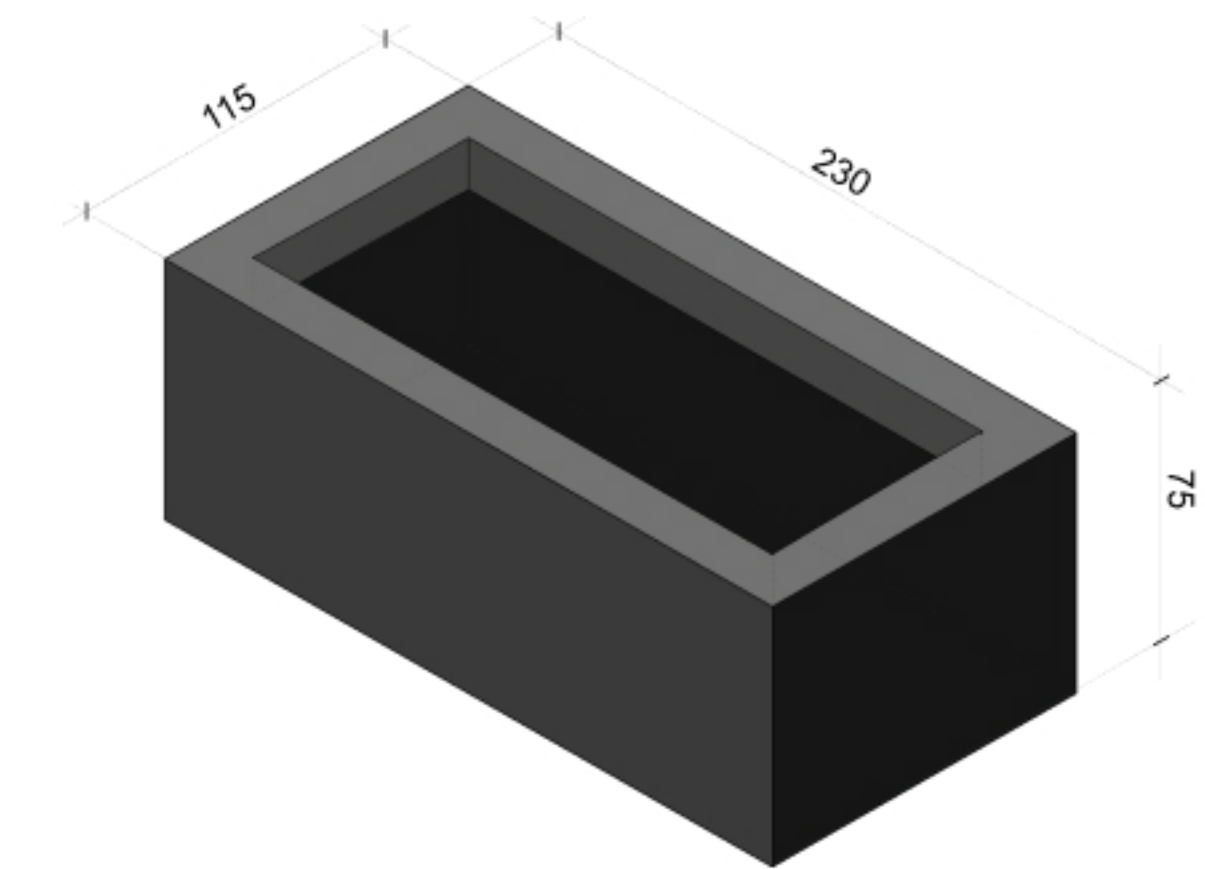
Plan



Elevation



Section



Isometric



Water  
Resistant



Load  
Bearing



Frost  
Resistance



Abrasion  
Resistance



Recommended Uses

## The Basic Brick



Real Images

# The Lego Brick



Water  
Resistant



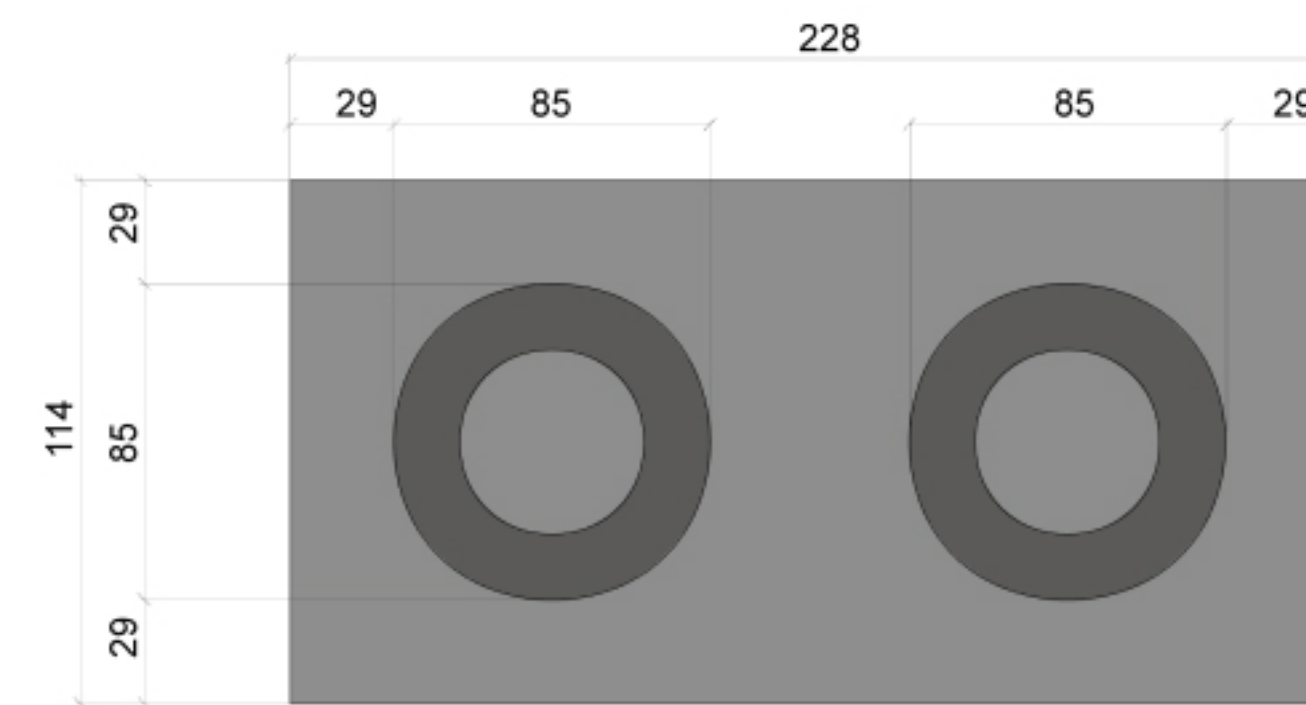
Load  
Bearing



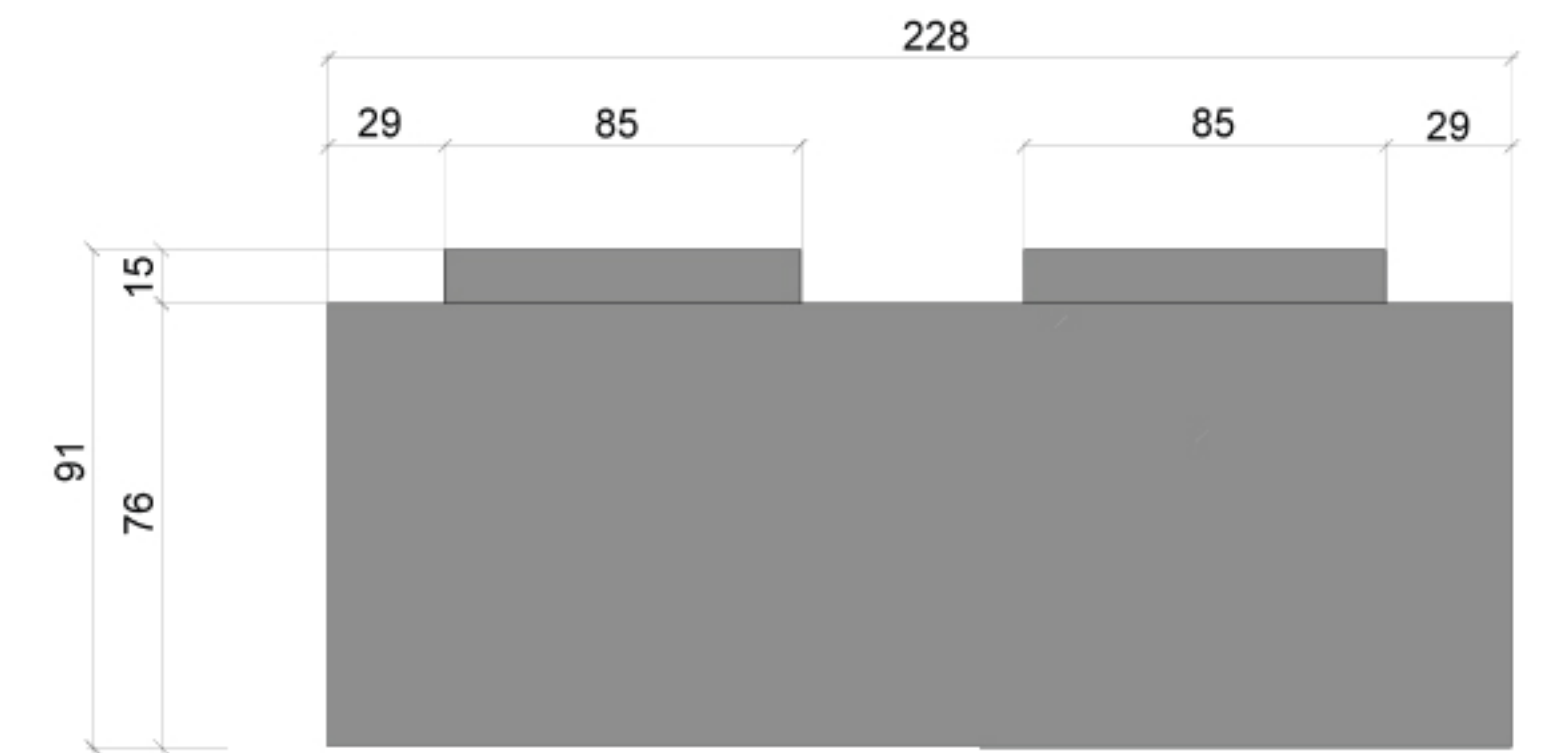
Frost  
Resistance



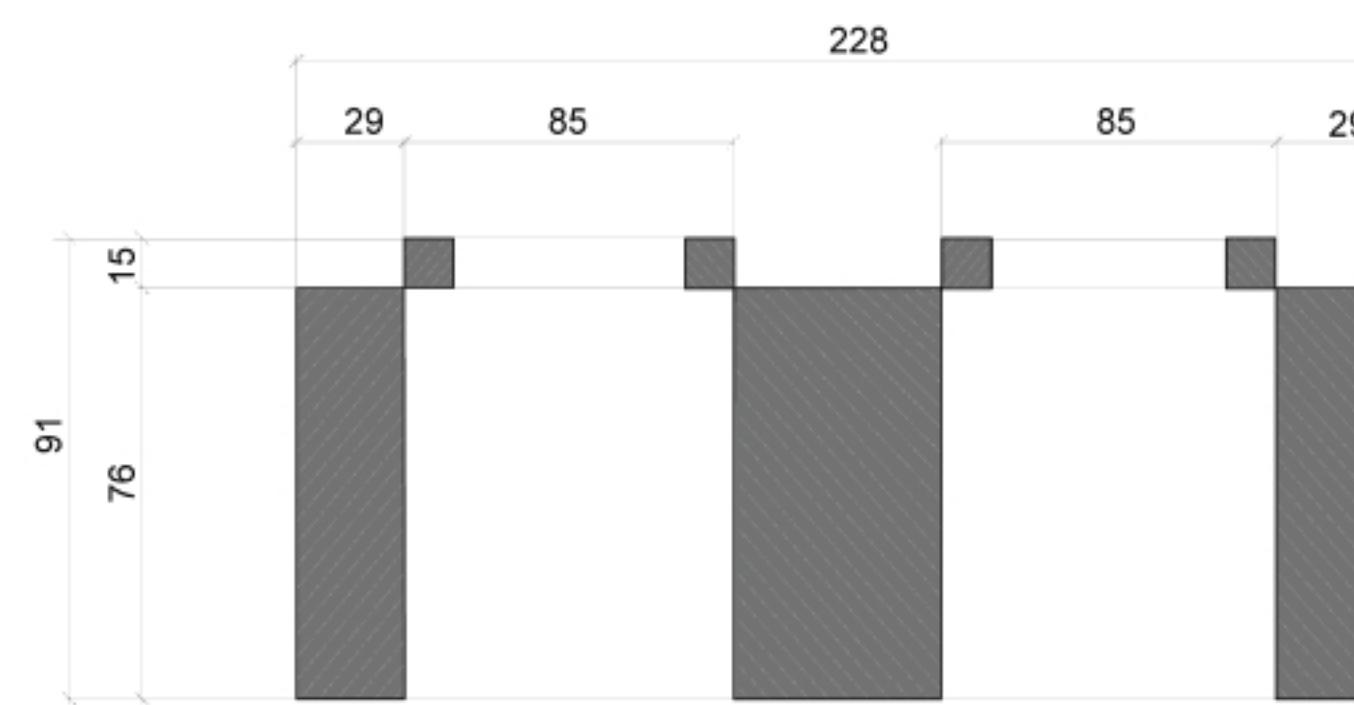
Abrasion  
Resistance



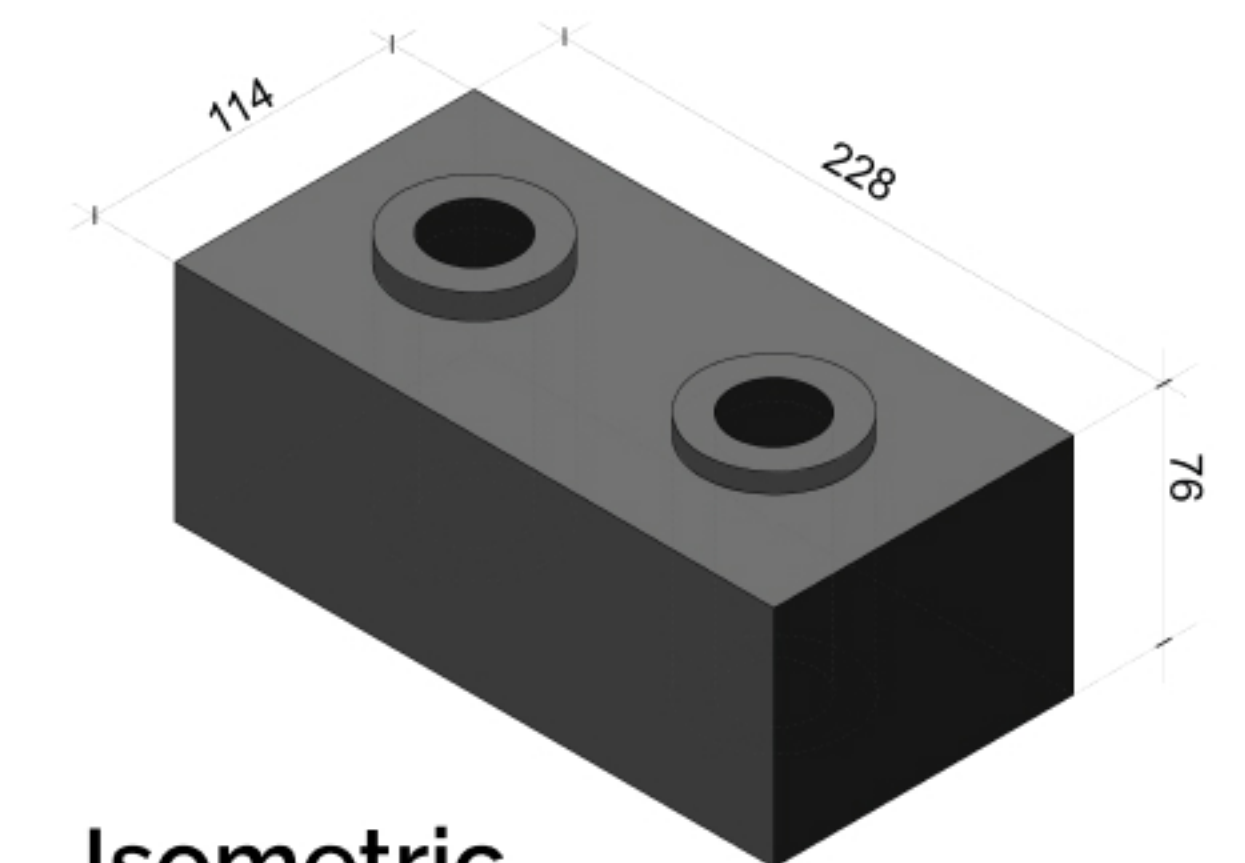
Plan



Elevation



Section



Isometric



Recommended Uses

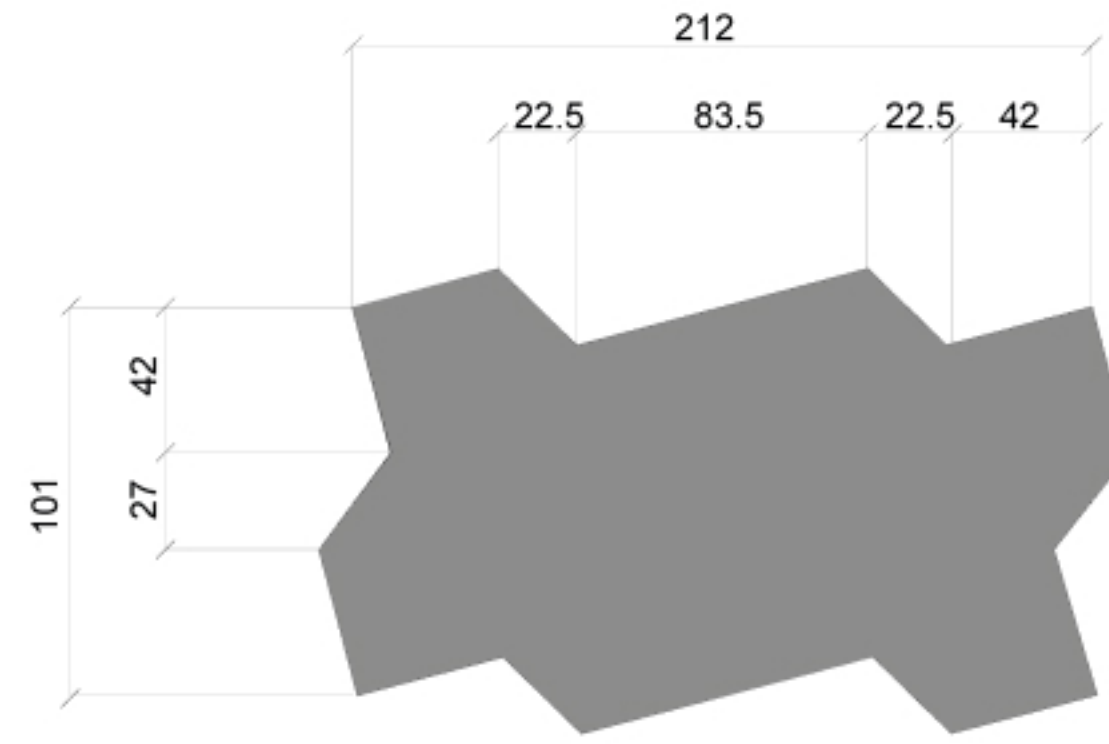
## The Lego Brick



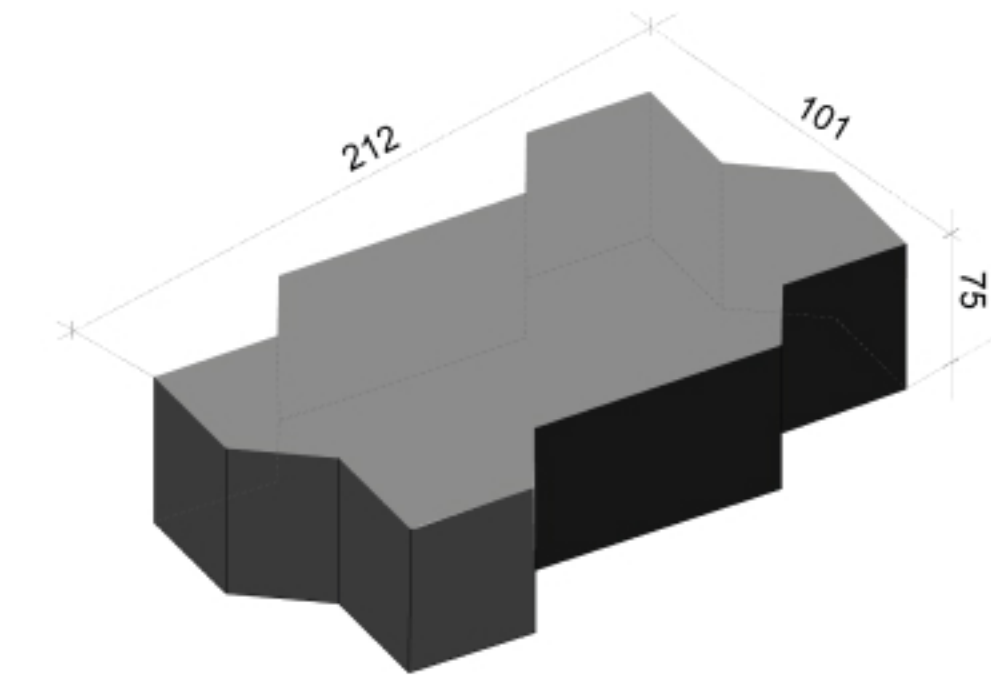
Real Images



# The Zig Zag Paver

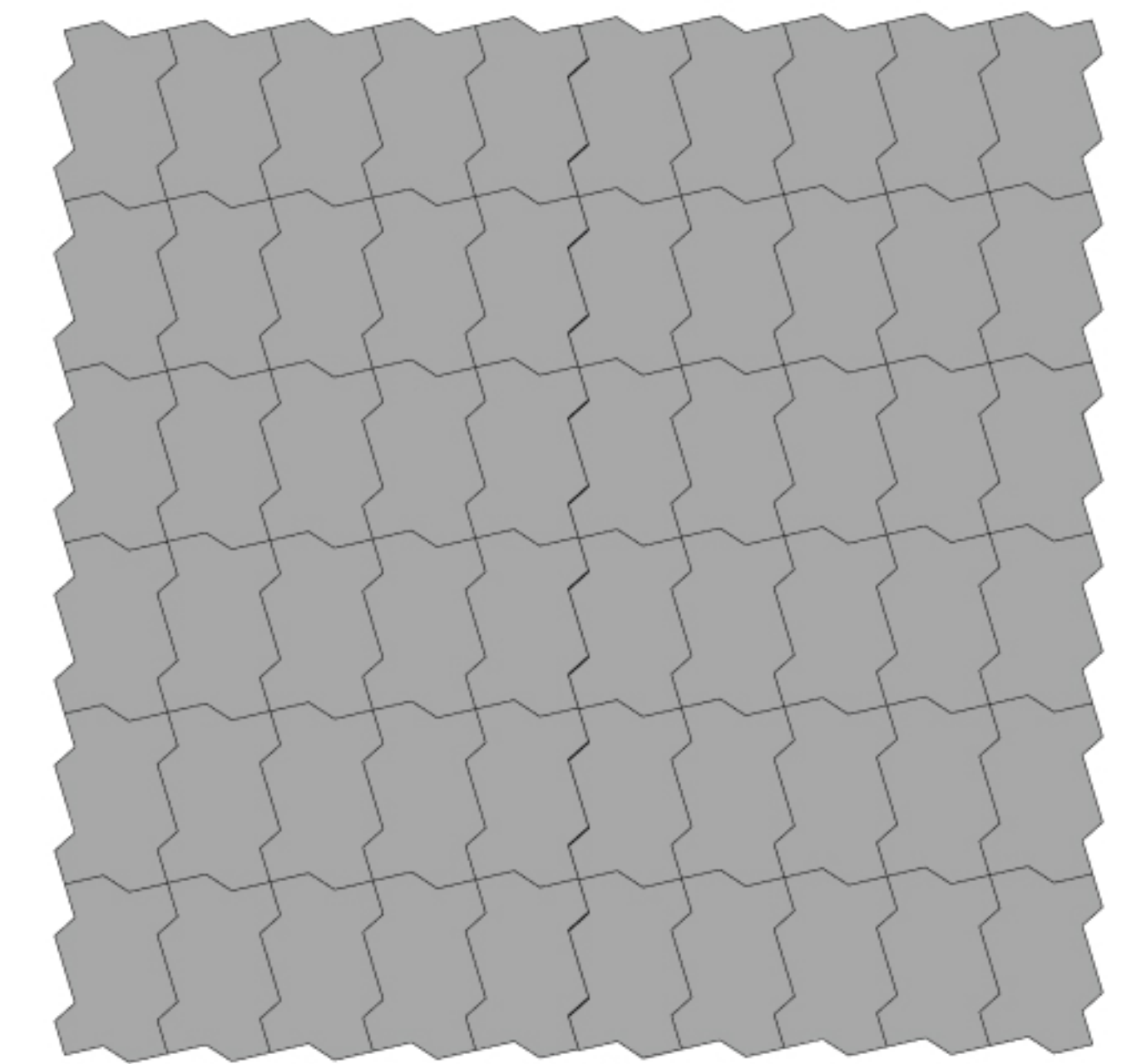


Plan



Isometric

this quick-to-install zig-zag paver is a solid, durable, and strong product designed to withstand heavy weights. this shape prevents any type of cracking on the surface.



Water Resistant



Load Bearing



Frost Resistance

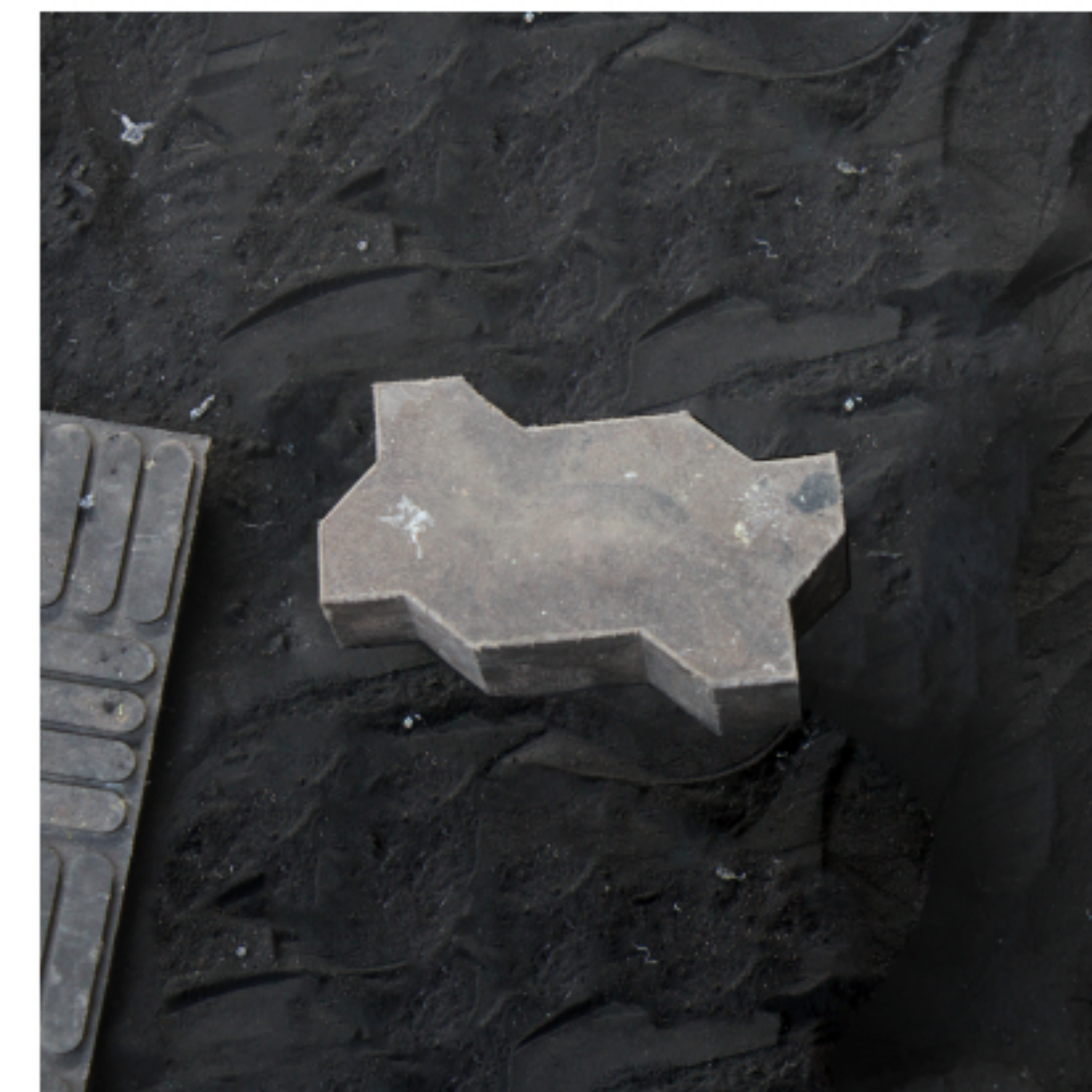


Abrasion Resistance



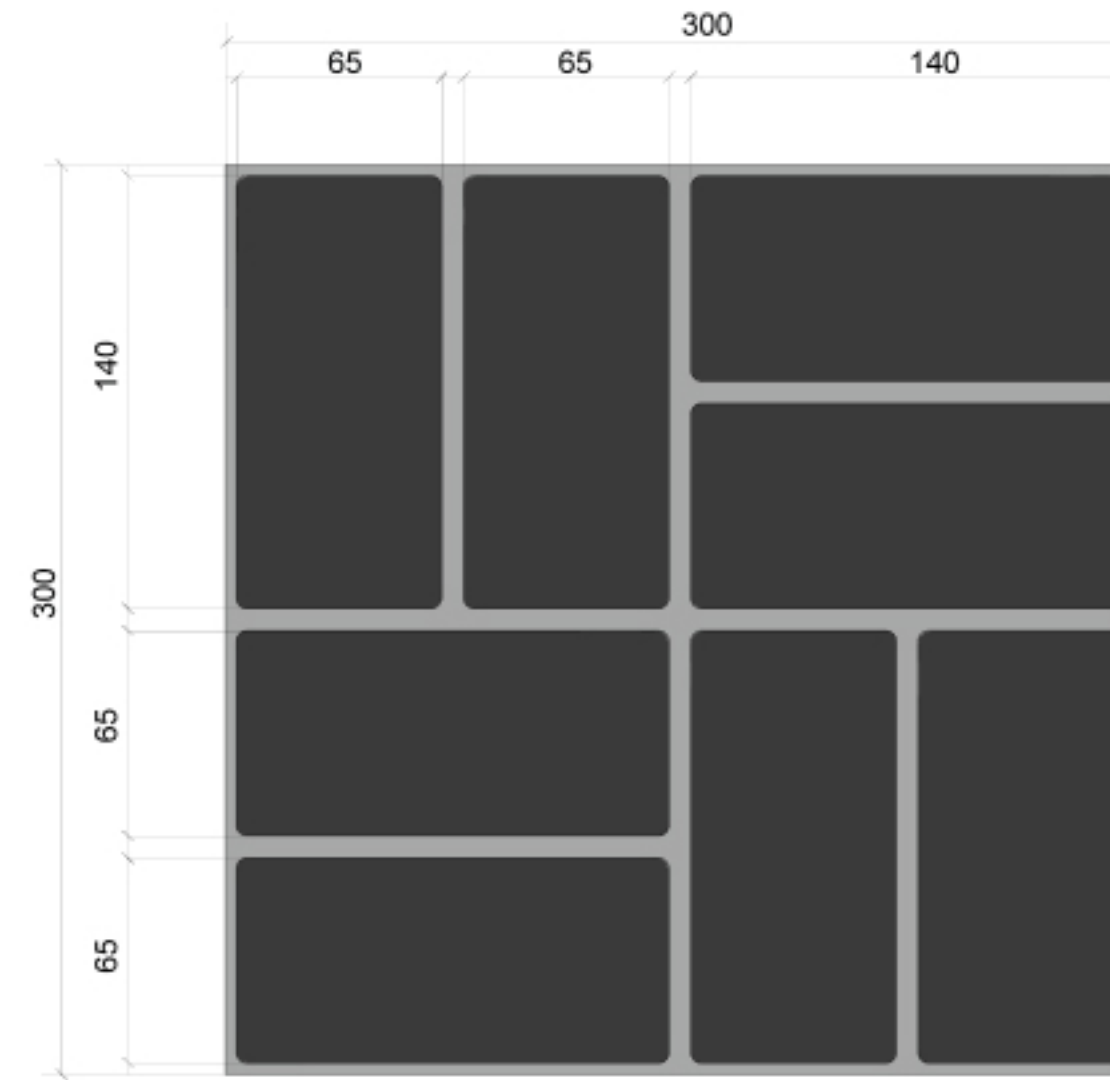
Recommended Uses

## The ZigZag Paver



Real Images

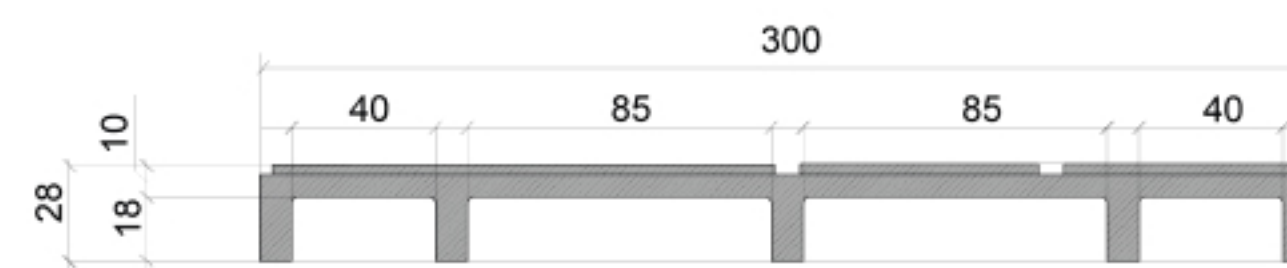
# The Square Paver



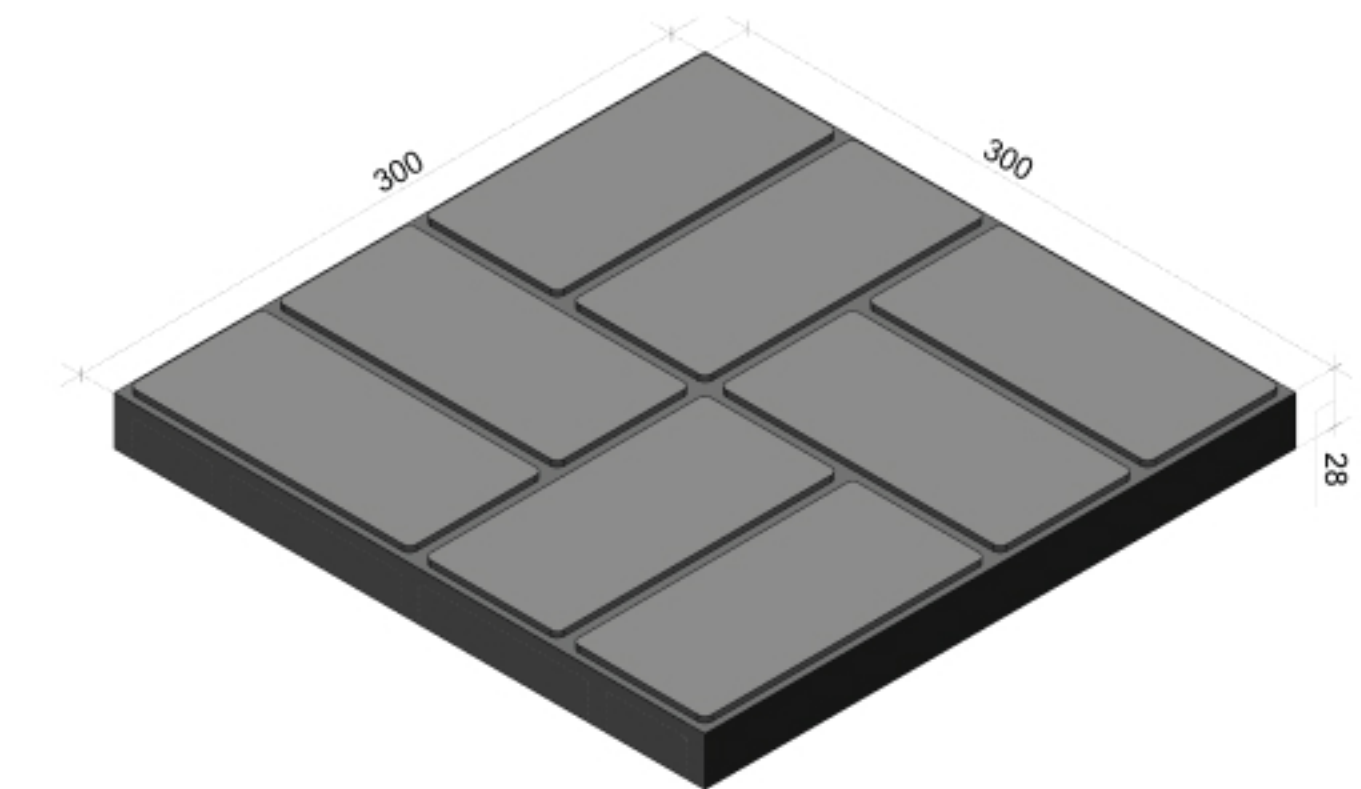
Plan



Elevation



Section



Isometric



Water Resistant



Load Bearing



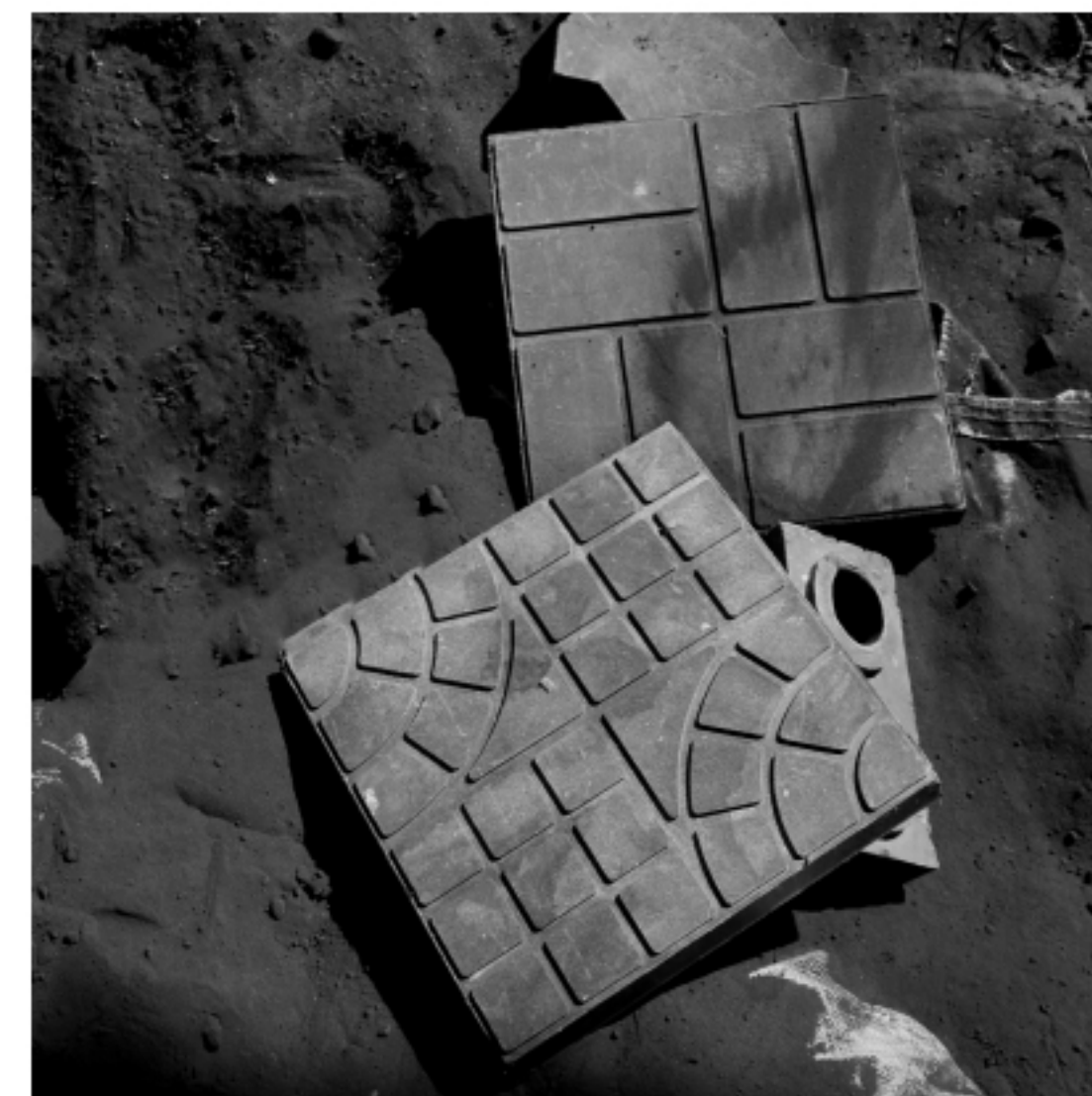
Frost Resistance



Abrasion Resistance



## The Square Paver



Real Images