

AK



**TYPES
USES &
APPLICATION**

DIORAMA SERIES

DIFFERENCES BETWEEN THE DIFFERENT TYPES OF FOAM AND ITS USES.

These products all belong to the family of construction insulators and none of them is dangerous for your health. Modelers have discovered their properties over time and found many different applications in scale modeling for them. They are mostly used to build bases, dioramas, vignettes, buildings and other structures.

Ak-Interactive present three types of foam that are the most useful in modeling and that cover almost all needs.

RESISTANCE TABLE	SPRAY	ACETONE	CYANO	ENAMEL	LACQUERS	ACRYLICS
CARVING FOAM	✓	✓	✓	✓	✓	✓
CONSTRUCTION FOAM	✗	✗	✗	✓	✓	✓
EXTRUDED FOAM	✗	✗	✗	✗	✓	✓

CARVING FOAM AK8092 / AK8093 / AK8094 & AK8095

This product also called balsa foam (it is the same). It is a phenolic foam and can be used for similar purposes as our Construction Foam, although it is somewhat more rigid and resistant than the other one. Both these foams can be combined and they perfectly supplement each other. Carving Foam has a density of 10 Pcf (pounds per cubic feet). Like the Construction Foam, it can also be combined with cork, plastic, metal or whatever you want to represent architectural elements on a facade or inside a house or any other structure. It is available in four variants:

- AK8092, 10mm thick A5 size piece.
- AK8093, 10mm thick A4 size piece.
- AK8094, 10mm thick A4 size piece.
- AK8095, 8mm thick A4 size piece.

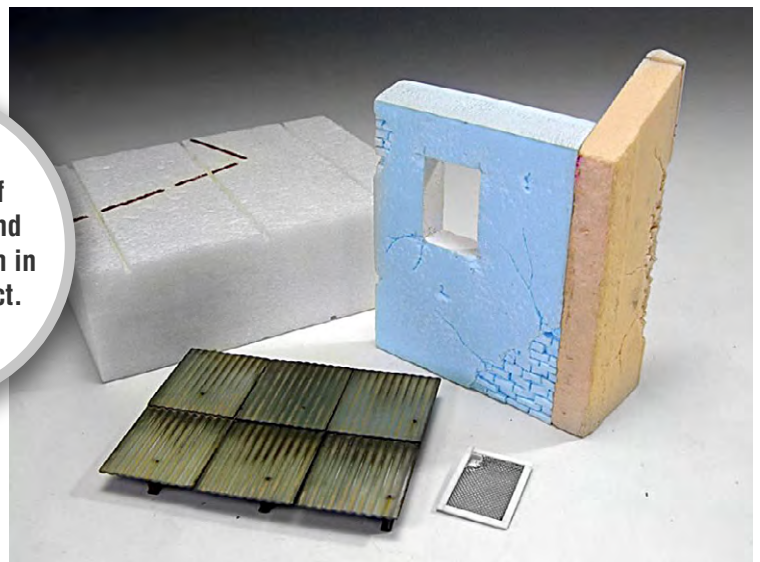
It fits perfectly and its lack of 'memory' or rebound effect makes the carving remain permanent. It can be easily cut with a sharp cutter or a small saw. For carving you can use any cutting or pressure instrument. The surface can be sanded if you require a very smooth finish. This material can be glued with PVA glue or cyanoacrylate gel adhesive (only to join various pieces of Carving Foam).

Carving Foam can be painted with acrylic paints. If a spray primer is used, there is no problem and it is very comfortable.

Carving Foam is non-toxic, but it is not advisable to breath in the dust.



Combination of Carving Foam and Construction foam in a building project.



We can sand the surface and soften the effects. Thanks to the very fine grain of the Carving foam, we can create very precise details. It is very resistant to acrylic paints and even lacquers or enamel paints.



CONSTRUCTION FOAM AK8096 / AK8097 & AK8098

This polystyrene can be used for creating and carving various structural elements of a vignette or diorama, such as walls, building, ruins, cobblestone and other types of pavements, etc. It is available in the following variants:

- AK8096, two 300 x 200mm sheets, both 6mm thick.
- AK8097, two 300 x 200mm sheets, both 10mm thick.
- AK8098, two 300 x 200mm sheets, one 6mm thick and one 10mm thick.

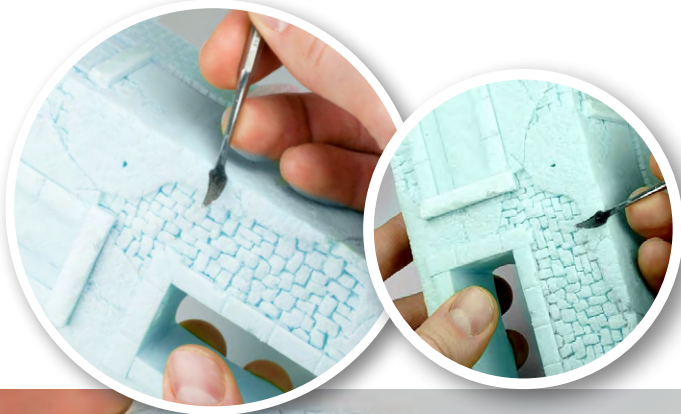
The product comes in a blue color, although there are also exist green and black foams with the same properties. It is basically a lightweight construction insulator. It is more pressure-resistant than the Extruded Foam, but similarly to the latter it has no 'memory', so any carving we created will remain intact if we do not retouch it further. This foam has a structure of closed internal cells, which are very homogeneous and dense. Its density is 33 kg/m³ and although it has a compressive strength of 300 kPa, it is more resistant than the Extruded Foam due to the properties of its internal cells but less than the Carving Foam. It is very resistant to moisture, and perfectly tolerates the application of paints and the subsequent enamel treatments. It can be cut into pieces with a cutter and glued with white glue (PVA glue). To shape the foam pieces, you can use any cutting or carving tool, such as those used for figure sculpting.

You can paint this foam with acrylic paints without any problem, although is useful firstly prime the surface with an acrylic primer. Any enamel product can then be applied for weathering treatments.

The surface of this material may be a bit rough after the cutting process, which is performed using an industrial hot wire. You can smooth the surface by sanding if necessary. It can also be sanded in order to create various effects. Although this foam is non-toxic product, it is not advisable to breath in the sanding dust. Any treatment with products of the acetone type, such as Extruded Foam, will cause irreversible damage and the product disappears, being 'eaten' by this diluent. But creating the effect of an explosion with a drop thrown from above that splashes, may lead to an impressively realistic result - just do the test (before being painted, although when painted, the foam is also damaged by acetone).



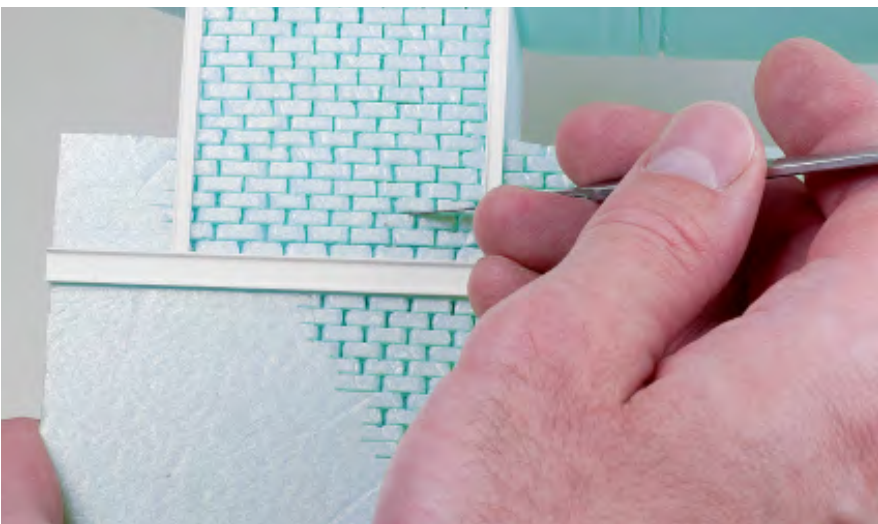
The size and thickness of our foam sheets are chosen to suit the typical modeler's needs. If a thicker sheet is required, you can glue more pieces together using white glue (PVA glue).



Depending on the choice of tool, we can achieve different effects. If we need straight cuts, we can previously draw a line with a pen or use a metal ruler as a guide.



Damage and surface texture can be easily reproduced in this material.



To paint the Construction Foam, we can apply acrylic paints directly over its surface. If we want to use more aggressive products, we have to prime the foam with a layer of acrylic putty or previously isolate this material.

EXTRUDED FOAM 30MM / AK8099 & AK8100

This extruded polyurethane is mainly the foam used to create the bases of the vignettes and dioramas. Not suitable for carving. It is available in two sizes:

AK8099 is a 30mm thick A4 size sheet.

AK8100 includes four 105 x 148mm sheets, 30mm thick, ideal for small vignettes.

This foam is light yellow (can also be white, blue, orange etc.), light and solid in appearance, but it can be easily cut with a sharp cutter or hot wire cutter. Pieces of this foam can be glued with white glue (PVA glue). It is not advisable to apply solvents or cyanoacrylate glue onto the bare foam without any surface protection. This foam has a medium resistance to pressure, a density of 35kg/m³, and compressive strength of 300 kPa, which generates a maximum of 10% deformation, thus if we make strong pressure with fingers, we will leave marks. It does not recover the previous form due to the lack of 'memory'. You can cover the sides of a foam piece with wood to improve the overall appearance, and cover the surface with modeling clay or tile adhesive to create the 'ground'.

If the Extruded Foam is not covered with anything, it can be painted with acrylic paints. It is, however, recommended to apply an acrylic primer to ensure that the solvents will not react with the material. You can also apply plaster, modeling clay or tile adhesive and then sand the surface if necessary. This allows the use of any type of product on top, as the plaster will protect the material.



The material is easily cut with a blade.



It can be easily shaped. You can also join different pieces with white glue.



It can be sanded and form any type of piece.



To protect it, it is highly recommended to cover the surface with modeling clay.



We can do the same with acrylic pastes, plaster or tile adhesive. It is important to protect the surface from solvents as they will deform the material.



An example of base made from Extruded Foam which was protected with Das Pronto modeling clay that allows for further work on its surface without any problem.

