

# Foamkore

A new lightweight cost-effective alternative to traditional panels

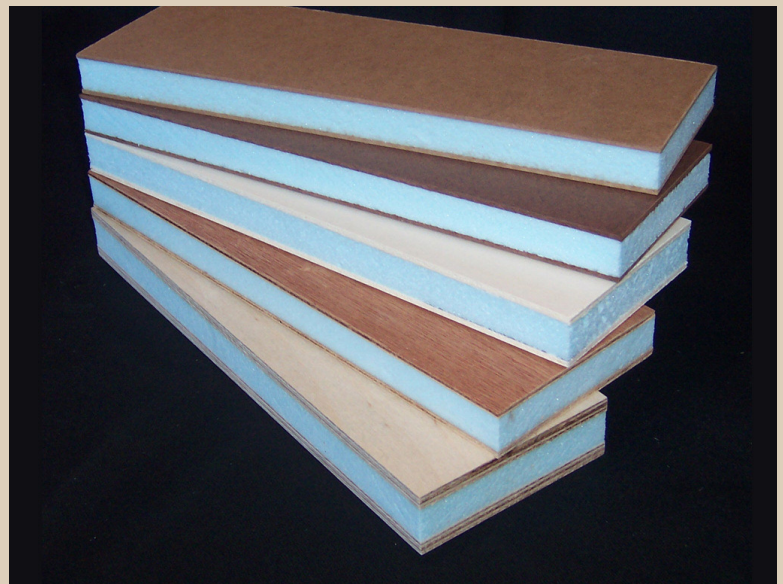


Foamkore consists of a balanced constructed foam board that provides a structural panel with greatly reduced weight. It consists of a polystyrene foam core and thin face materials. Foamkore is now available in the following standard face materials:

Hardboard  
Fiberboard  
Lauan Plywood  
Poplar Plywood  
Birch Plywood

\*Other available face materials as requested\*

- Up to 80% reduced weight when compared to conventional panels of plywood, particle board, and MDF.
- Rigid face materials provide the ability to use conventional methods of attachment.
- The stable panel provides the ability to apply a variety of edging options including edge insert, outer edge band and conventional edge banding.
- The balanced panel allows for a variety of face materials to be added such as veneer, laminates, paper, graphics and other thin materials.
- Foamkore panels are available in a nominal panel size of 4' x 8'. Panels are available in thickness from 3/4" up to 3". Optional custom sizes, thickness and face options are available upon request.
- Product applications include: shelving, partitions, ceiling panels, wall systems, signage, displays, theater props, swing doors, elevators, kiosks, movable food carts, table tops, furniture, cabinets, motor homes, boats.



# FOAMKORE SPECIFICATIONS

## PRODUCT DESCRIPTION

**Foamkore** is a balanced constructed foam board that provides a structural panel with greatly reduced weight. It consists of a polystyrene foam core and thin face materials.

## PRODUCT CHARACTERISTICS

**Foamkore** is constructed by capturing a polystyrene foam core with higher density face panels to provide a strong lightweight panel with structural integrity. Two core materials are available in this product. One is an extruded polystyrene foam (XPF) that is closed cell in structure and provides a consistent and uniform surface to machine. The other product is an expanded polystyrene foam (EPF) with a slightly lower density. The sandwich panel construction method incorporates the use of thinner outer panels bonded to a thicker lighter core. This construction provides for a strong light panel that can be compared to a truss beam. This panel concept is to space thin stronger face panels apart with a thicker core to ensure the combination will be stiff and strong.

## ATTACHMENT METHODS

The rigid face materials used in the **Foamkore** product provide the ability to use conventional attachment methods. The use of glue, staples, nails, screws and other similar fasteners will allow the panel to be physically and structurally attached to other materials. The big advantage with **Foamkore** is the reduced weight from 50-80% from conventional panels, This reduced weight will allow for usages where heavier panels would be prohibited. **Foamkore** is appropriate for use in areas where weight is a concern.

## FIRE RATING

The extruded polystyrene core has been ASTM E84 tested with results of 5-10 Flame Spread and 60-200 smoke development which falls in a Class A qualification. However, the addition of the face materials must be taken into consideration for overall fire rating.

## MOISTURE RESISTANCE

In most applications, **Foamkore** is a moisture resistant material. The core material provides an outstanding moisture resistance to water. The face panels are laminated with moisture resistant glue leaving only the face susceptible to moisture. In tests, all the plywood face materials have performed extremely well.

## EDGE TREATMENTS

Many edging options are possible with the **Foamkore**.

**Edge Capture:** The adjoining panels or rails can capture the panel. This is done in the exhibit industry by the use of extruded plastic or aluminum rails. This can be a structure part of just a U channel to cover the edge.

**Edge Insert:** The edge of a panel can be machined to accept a wooden insert. This insert can be held in place with glue or pinned until the glue is cured.

**Outer Edge Band:** A wooden outer band can be glued to the **Foamkore** by use of a wood PVC glue. This will allow for more edge machining options.

**Edgebanding:** An edge band can be applied by use of an automated edgebander or by hand with a contact or PVA adhesive. When using automated edge banding equipment, proper adjustments and tests should be made to provide the desired results. Contact adhesives developed for polystyrene foam are required.

**Corner Post:** The ability to remove a small area of the core and one side allows for the attachment by glue and nails of a wooden strip to serve as a post to provide the means to attach panels with other material.

## LAMINATING METHODS

Most face materials can be easily adhered to the **Foamkore** panels. The use of contact adhesive is advisable where possible. It is possible to cold or hot press material but minimum pressure should be used. A pressure of 10-15psi is usually suitable for these applications. An actual test should be used to determine what is best suited for the material you may want to laminate. Also, it is important to remember that **Foamkore** is a balanced constructed panel and the need to keep it stable may require equal material to be applied to both sides.

## CONDITIONING AND STORAGE

Proper storage is extremely important with **Foamkore**. The balanced constructed panel should be stored on a flat uniform surface away from direct contact with the floor to allow for air circulation. A cover sheet is recommended to maintain uniform moisture levels. Some weight is desired to keep the cover sheet tight during storage. If panels must be stored in a vertical position make sure this is done without excessive weight to either side.

Complete technical and fabrication information can be found on our web site [www.kerfkore.com](http://www.kerfkore.com).

## FOAMKORE CLASSIFICATION AND DIMENSIONS

Foamkore w/extruded polystyrene core (Nominal 4'x 8')

Item #	Face Material	Thickness	Wt./SF
FK75HB08	.080 Hardboard	3/4"	1.001bs
FK75FB06	1/16" Fiberboard	3/4"	.8121bs
FK75LP12	1/8" Lauan Plywood	3/4"	.75lbs
FK75PP12	1/8" Poplar Plywood	3/4"	.6251bs
FK75CB18	3/16" Birch Plywood	3/4"	1.30lbs

Foamkore w/expanded polystyrene core (Nominal 4'x 8')

Item#	Face Material	Thickness	Wt./SF
FKW75HB08	.080 Hardboard	3/4"	1.00lbs