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## SUPERIOR & VERSATILE EXPANDED POLYSTYRENE SOLUTIONS

ANOTHER ENGINEERED SOLUTION FROM:



### VERSATILE EPS PRODUCTS FOR BUILDING & CONSTRUCTION

Styroboard EPS by Foamex is a highly versatile range of expanded polystyrene solutions ideal for use across a wide range of building and construction applications, as well as retail and creative applications.

Styroboard EPS is a carefully developed and refined Australian innovation exclusive to Foamex, Australia's leader in polystyrene product development and distribution. Through an extensive range of innovative products, Styroboard EPS has been servicing the building, construction and signage industries in Australia for the past 40 years

Strong, durable and lightweight, Styroboard EPS is an industry validated insulation material for both commercial and residential construction applications. The Styroboard EPS range delivers an extensive suite of EPS solutions with a variety of applications, ranging from floors to internal walls, cool rooms and even void fill.

### AUSTRALIAN MADE PRODUCTS FOR AUSTRALIAN CONDITIONS

The Foamex range of Styroboard EPS products are relied upon Australia wide for insulation and decorative purposes across a wide range of industries. Durable and long lasting, Styroboard EPS products are light in weight for easy installation, offer outstanding acoustic benefits, and provide superior thermal performance. Weather resistant and CFC-free, all Styroboard EPS products are manufactured locally to precise Australian standards, and also comply with all relevant Australian Building Codes.

#### Industry leading quality assurance measures

Foamex manufactures all of its Styroboard EPS products in-house in Australia from the highest quality materials. Before going into production, all of our expanded polystyrene is stringently strength tested against a range of extensive criteria.

The innovative manufacturing technology we use to produce our Styroboard EPS products is unique to Foamex, allowing us to create highly customised solutions for our customers. This is just one of the reasons why Foamex is one of the largest and longestserving manufacturers of EPS in Australia.

While other suppliers may source their EPS products from overseas suppliers, producing our own products, in our own facilities is our way of ensuring that our clients receive premium Australian products designed and produced for Australian conditions. When you choose Foamex for your EPS product needs you will not only be supporting a 100 per cent Australian owned and operated company, but you will also be throwing your support behind the Australian manufacturing industry and contributing the Australian economy and promoting local employment in the sector.

### STYROBOARD EPS PRODUCT RANGE

Foamex offers a range of Styroboard EPS products available in various sizes and specifications depending on your project requirements.

#### StyroBloc

A multi-use, versatile product that can be shaped or cut to your specific requirements.

#### StyroSheet

A durable and lightweight construction & insulation material for building, retail and creative applications.

#### StyroPod

A waffle pod void filler with a unique diamond design, ideal for residential concrete slabs to reduce the effects of soil movement and reduce the amount of concrete required for a build.

#### StyroPak

Our EPS boxes are airline approved and ideal for insulating, protecting, and transporting fresh produce or fragile items.

#### **Design Features**

- Light in weight and easy to handle
- 100% recyclable and sustainably produced
- Strong and durable
- Weather resistant with low moisture absorbency
- Cost effective and economical
- Contains no CFCs
- Excellent thermal insulation properties to ensure long term R values
- Truly versatile can be used across a range of industries and applications for insulation or creative purposes
- Provides insulation from extreme temperature and noise
- Complies with Australian Building Standards AS1366.3:1992

If your project demands an Australian made, quality expanded polystyrene solution that will stand the test of time, then make sure its Styroboard EPS from Foamex.



### FIRE-SAFE SOLUTIONS THAT REDUCE RISK

All Styroboard EPS building products are manufactured from a fire-retardant raw material and do not present as a fire hazard when correctly installed. Similar to other organic materials, polystyrene will burn when in it comes into contact with a flame. However, the unique, safety-first chemical composition of Styroboard EPS means it will self-extinguish when the fire source is removed.

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#### AN ENVIRONMENTALLY SAFE PRODUCTION PROCESS

During the production of all Foamex Styroboard EPS products, there are no ozone depleting or CFC gases produced. The manufacture of the Styroboard EPS range uses less than 0.1% of global crude oil as a feedstock, yet can deliver up to 200 times its own resource in thermal energy savings. In turn, this plays a positive role in reducing carbon dioxide emissions, and the effects of global warming.

# **StyroBloc**<sup>®</sup>

# Versatile and adaptive EPS blocks for many uses

StyroBloc is a premium expanded polystyrene block made by Foamex, from which a range of carefully researched and refined Foamex solutions are developed. These solutions include our StyroSheet and StyroPak products, as well as other creative applications.

Manufactured in Australia at Foamex facilities from Styroboard EPS expanded polystyrene, StyroBloc is lightweight for easy installation, weather resistant, long-lasting, and the perfect solution for providing high levels of thermal insulation as well as acoustic benefits.

StyroBloc can be shaped, cut or laminated to suit the specific requirements that you need. A truly versatile product, StyroBloc can be used across a range of building & construction applications, ranging from void filler through to pipe insulation and intricate architectural mouldings. It is also a popular choice for retail and creative applications (such as event props), as well as for model making and cool room insulation.

#### **Design Features**

- Lightweight & easy to install
- Versatile & cost effective
- Excellent thermal insulation properties
- Weather resistant with low moisture absorption
- Retains its structural integrity ensuring long term R values
- Environmentally responsible & fully recyclable
- Complies with Australian Building Standards AS1366 Part 3 –
  1992

#### **Specifications**

- Width: 1200mm
- Length: 2400mm to 5000mm
- Thickness: 600mm



# StyroSheet<sup>®</sup>

### **EPS sheets for insulation** & creative applications

Durable and long lasting, StyroSheet EPS sheets are the material of choice for a range of applications across multiple industries. Manufactured in Australia from Foamex's industry leading Styroboard EPS, StyroSheet offers industry leading thermal performance, strength to weight ratio, shock absorption and acoustic benefits.

StyroSheet is a popular insulation material for both external and internal insulation requirements across commercial, industrial and residential building applications. Suitable for use on steel stud, timber stud, concrete and masonry structures, StyroSheet offers an efficient and economical insulation solution.

With its ability to withstand the elements coupled with its excellent thermal insulation properties and low moisture absorbency, StyroSheet helps protect against the adverse effects of temperature and noise. StyroSheet EPS sheets provide no nutritional value to plants or animals, are safe to handle, easy to install, contain no CFC's, and are 100% recyclable.

StyroSheet from Foamex is also a popular product of choice for use in retail and creative applications. Easy to handle and highly versatile, StyroSheet is an economical, environmentally friendly solution for custom signage, retail displays, theatre props, and more.

#### **Design Features**

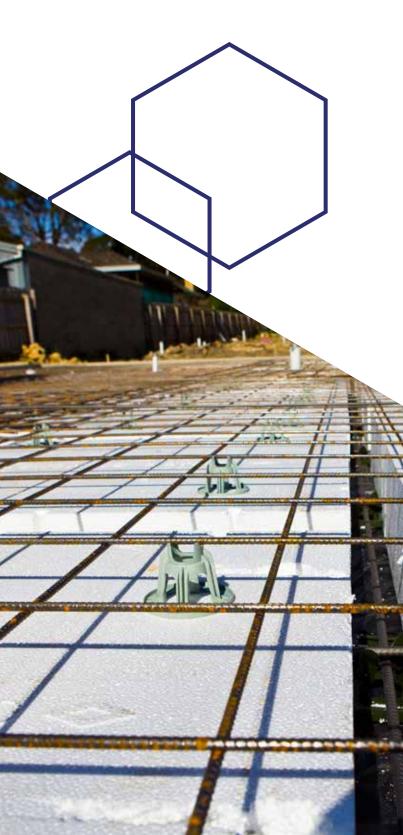
- Versatile, lightweight, and durable.
- A proven construction material.
- 100% recyclable.
- Retains its structural integrity ensuring long term R values.
- Cost-effective.
- Easy to handle.
- Excellent thermal capabilities and acoustic benefits.
- Low moisture absorption.

#### **Specifications**

- Width: 300mm 1200mm
- Length: 1200mm 5000mm
- Thickness: 10mm 600mm

# **StyroPod**<sup>®</sup>

### An engineered waffle pod void former system for concrete slabs



StyroPod by Foamex is an Australian made, lightweight EPS waffle pod void former perfect for use in concrete slabs in the building and construction industry. Designed specifically for use in residential building, StyroPod (formerly known as Diamond Pod) waffle pods provide under slab insulation and support, working in unison with natural soil movements, and lowering the amount of concrete required for a build.

StyroPod makes construction quicker and more cost-effective compared to traditional concrete pours, while delivering a higher level of insulation through the natural air pockets in the expanded polystyrene and the moulded cells within the waffle pod design. StyroPod waffle pods can be used with any bracket and steel reinforcing mesh systems.

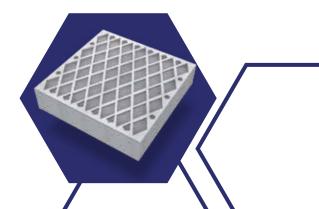
Manufactured from high quality, Australian manufactured Styroboard EPS expanded polystyrene, StyroPod waffle pods are unaffected by water, so therefore safer to install as there are no trenches to cave in during construction. The inclusion of StyroPod waffle pods in a slab adds an insulation benefit of up to R1.0 (W/mk thermal resistance) as standard.

#### **Design Features**

- Lightweight, durable and easy to handle
- Weather resistant with low water absorption
- Includes flame retardant additives
- •100% recyclable & sustainable
- Engineered to be stronger than standard waffle pods
- Complies with Australian Building Codes & Standards
- Patented diamond design ensures greater stability

#### **Specifications**

- Width: 1090mm
- Length: 1090mm
- Thickness: 150mm, 225mm, 300mm, 375mm.



# StyroPak<sup>®</sup>

### A versatile, economical and lightweight packaging solution

StyroPak EPS boxes are a convenient, inexpensive, and lightweight packaging solution for the foodservice and pharmaceutical industries. Manufactured in Australia from high quality, Australian made Styroboard EPS, StyroPak boxes are not only versatile, economical and durable, they also offer high shock absorption characteristics.

Together, these traits make StyroPak boxes perfect for the storage and transport of fragile, expensive or temperature sensitive goods. Additionally, the lightweight nature of expanded polystyrene also means reduced transportation costs compared to traditional packaging material.

StyroPak boxes are used to package a range of fresh produce items, including seafood, meat, fruit and vegetables. Moisture resistant and chemically inert, they are extremely safe for use as food packaging, and their insulation properties keep food fresher for longer during transport.

With up to 48 hours of chill time during transport, StyroPak polystyrene boxes are the cheaper and environmentally friendly alternative to traditional packaging solutions such as timber, straw and cardboard. Complying with industry food transportation standards, StyroPak EPS boxes are resistant to bacteria and moisture, as well as 100% recyclable. With their insulating properties and lightweight yet sturdy nature, StyroPak EPS boxes are also fantastic for safely transporting temperaturesensitive pharmaceutical products.

Whether you need to protect valuable items during shipping, maintain a set temperature and humidity level, or keep fresh produce fresher for longer, look no further than the StyroPak range of polystyrene boxes. The StyroPak range includes insulated ice/cooler boxes (4L to 54L), produce boxes, seafood boxes, and wine boxes.

Foamex have many recycling arrangements in place with our customers who require StyroPak EPS boxes. As they are fully recyclable, the old boxes come back to our state of the art recycling plant and get broken down and manufactured into other sustainable building products.



#### **Design Features**

- Easy to handle & stack
- Chemically inert & moisture resistant safe for food
- Airline approved
- 100% recyclable
- Outstanding shock absorbency & compression
- Versatile can be moulded into any shape to suit your requirements



Australian Made. Australian Owned. Build Sustainably. Build with Foamex.

www.foamex.com.au



The Styroboard EPS range delivers innovative and truly sustainable solutions for residential construction, commercial building, packaging, retail and creative applications.

All Styroboard EPS products Foamex produces are truly environmentally friendly solutions, both in terms of how they are manufactured, and how they function in the field. Made from 98% air, Styroboard EPS can be shaped, moulded, and compressed into durable, versatile, and long-lasting products that offer excellent thermal insulation properties that ensure long-term R values.

# Pioneering environmentally friendly EPS production

There are no ozone depleting or CFC gases produced during the manufacture of Foamex Styroboard EPS products. For each kilogram of oil used in the manufacturing process, savings of up to 200kg of heating fuel can be made over the average life of a house. In turn, this plays a positive role in reducing carbon dioxide emissions, and the effects of global warming.

But it's not just how we produce our Styroboard EPS products in an environmentally friendly manner. It's also how our products themselves perform in the field over many years.

Styroboard EPS products remain environmentally safe and sustainable solutions over the course of their extended lifetime in use in building and construction projects. The use of Foamex Styroboard EPS products promotes sustainable construction and building practices and green home building.

Foamex manufactures all Styroboard EPS products in house at our own facilities, meaning we have 100 per cent control over production and can ensure sustainable practices are adhered to from start to finish. Security hit with the

# STYROBOARD EPS: TECHNICAL SPECIFICATIONS

Australian Standard 1366, Part-3 1992 Physical Properties of Rigid Cellular Polystyrene sets out the minimum required properties for six classes of EPS. The Standard defines the industry specifications and manufacturing methods for compliance.

The table below details the physical properties of EPS that are mandated for satisfying AS 1366, Part 3-1992. Foamex Styroboard EPS is stringently manufactured to meet all requirements defined in Australian Standard 1366, Part-3 1992.

VVH32, VVH36 & VVH38 are additional grades developed by Foamex that sit outside of this standard to meet the demand for customised requirements.

NB: The following technical specifications are only applicable for StyroSheet and StyroBloc.

PHYSICAL PROPERTIES	UNIT	CLASS									
		L	SL	S	м	н	VH	VVH32	VVH36	VVH38	TEST METHOD
Compressive stress at 10% deformation, min.	kPa	50	70	85	105	135	165	250	300	350	AS-2498.3
Cross breaking strength, min.	kPa	95	135	165	200	260	320	500	550	600	AS-2498.4
Rate of vapour transmission, max. measured parallel to rise at 23°C	µg/m2.s	710	630	580	520	450	400	340	280	220	AS-2498.5
Max. dimensional stability of length, width and thickness, 7 days at 70°C	%	1	1	1	1	1	1	1	1	1	AS-2498.6
Min. thermal resistance (50mm sample), at a mean temperature of 25°C	m2K/W R(50/90)	1	1.20	1.22	1.25	1.40	1.41	1.43	1.45	1.5	AS/NZS 4859.1-2018

FLAME PROPOGATION CHARACTERISTICS	UNIT	CLASS	TECT METUOD								
		L	SL	S	м	н	VH	VVH32	VVH36	<b>VVH38</b>	TEST METHOD
Median flame duration max.	SD	2	2	2	2	2	2	2	2	2	AS-2122.1
Eighth value max.	SD	3	3	3	3	3	3	3	3	3	AS-2122.1
Median volume retained	%	15	18	22	30	40	50	60	60	70	AS-2122.1
Eighth value min.	%	12	15	19	27	37	47	57	57	68	AS-2122.1

OTHER PROPERTIES	UNIT	CLASS									TECT METUOD
		L	SL	S	М	н	VH	VVH32	VVH36	VVH38	TEST METHOD
Density - nominal	kg/m3	11	13.5	16	19	24	28	32	36	38	n/a
Compressive strength at 1% deformation, max.	kPa	14	23	31	42	58	60	63	65	70	ASTM D1621
Compressive strength at 5% deformation, max.	kPa	33	59	68	95	134	164	230	290	340	ASTM D1621
Flexural strength, min.	kPa	60	150	178	218	304	337	362	385	413	ASTM C203
Elastic modulus, min.	kPa	1450	2200	3100	4250	5850	7250	8650	9850	10950	n/a
Water absorption by total immersion, max.	Vol. %	4	4	4	3	3	2	2	1	1	ASTM C272
Buoyancy force	kg/m3	989	986.5	984	981	976	972	968	965	963	n/a
Coefficient of thermal expansion	m/m deg K	6.3 x 10-5	6.3 x 10-6	6.3 x 10-7	6.3 x 10-8	ASTM D696					

#### RESPONSIBLE STYROBOARD EPS RECYCLING PRACTICES

Foamex's approach to producing its Styroboard EPS products delivers a circular economy of manufacturing and production that ensures waste is minimised – almost entirely – and that recycling is a paramount concern.

As a proud member of Expanded Polystyrene Australia (EPSA), Foamex is committed to reducing the amount of EPS polystyrene waste being sent to landfill in Australia. Our facilities in Sydney, Melbourne, Brisbane and Adelaide are actively involved in the recycling of EPS products from end users, building and road construction sites, as well as other EPS manufacturers. Our granulating machines efficiently reduce moulded EPS into beads, which are then reformed into new, sustainably produced EPS products.

We stringently follow all EPSA recommended EPS distribution and clean-up responsibilities outlined in the Pod Code of Practice, and we partner with our clients and the local communities to help raise awareness around the correct way to dispose of EPS polystyrene.

# OUR RESPONSIBILITIES AT CONSTRUCTION SITES

Foamex is a staunch supporter of EPSA's product stewardship scheme targeting the reduction of expanded polystyrene litter from building sites to help reduce the number of polystyrene offcuts sent to landfill.

All Styroboard EPS products are delivered to construction sites in a responsible manner, tied down in accordance with industry approved methods to prevent damage and blow aways. We supply scrap bags to construction sites with all of our Styroboard EPS deliveries to assist with the separation of the EPS offcuts from general waste. We also actively work with building contractors to make arrangements for waste collection and transport the filled scrap bags back to our facilities for repurposing into new polystyrene products.

While EPS is recyclable, it should not be put in your typical household general rubbish or recycling bins. Recycling EPS requires a very specific process that happens outside of typical household recycling. At Foamex, we accept unwanted EPS from the general public at all of our locations across Australia. Visit foamex.com.au to find the Foamex branch closest to you.

#### RECYCLING AND REUSING EPS

Expanded polystyrene can be recycled and reused up to seven times before its structural integrity starts to degrade. As a responsible EPS manufacturer, Foamex ensures that EPS recycling is a core function of our business. We even have facilities where the general public can drop off their polystyrene packaging from general household appliances for Foamex to recycle and reuse.



### FOAMEX: INNOVATION IN ALTERNATE BUILDING AND INSULATION PRODUCTS

Foamex is one of Australia's largest manufacturers of high-quality building and insulation products. We supply a range of extruded polystyrene (XPS) and expanded polystyrene (EPS) specialty foam products for various residential and commercial building applications, civil engineering applications, packaging applications, as well as for retail and creative purposes.

A nationally recognised leader in sustainable building and insulation solutions, Foamex is proudly Australian-owned and operated. All of our polystyrene products are manufactured in-house to strict Australian quality control standards.

The Styroboard EPS range of products are available to order direct from your local Foamex sales office.

#### CALL 1300 AU FOAM

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