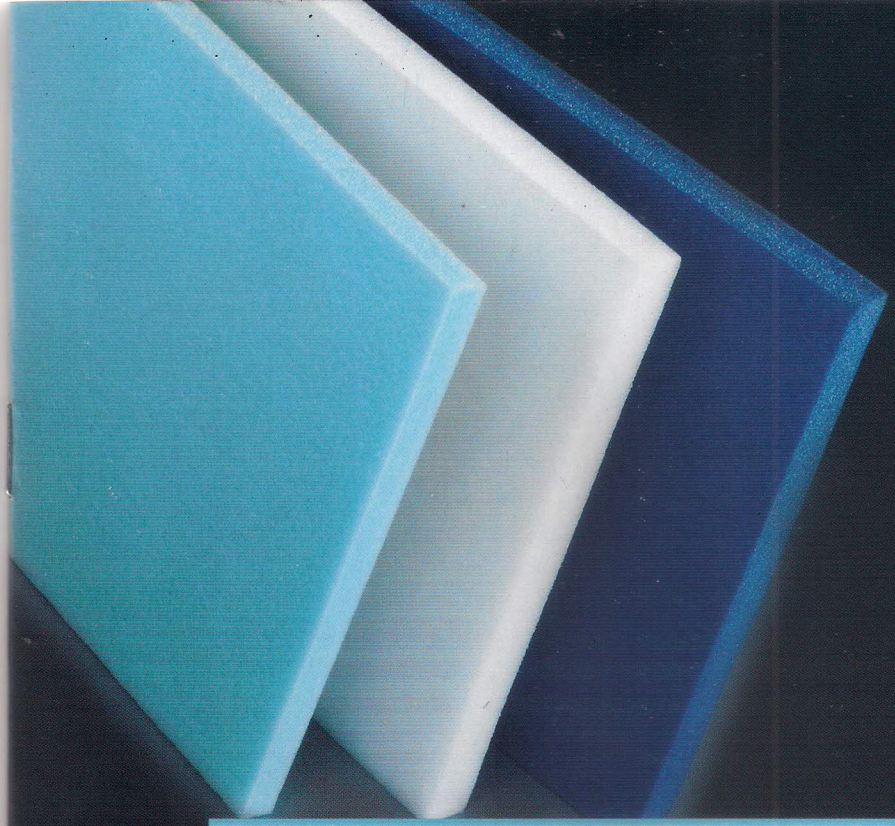


- Geofoam
- Insulation
- Packaging

Prima
FOAM

بريما فوم

www.primafoam-eg.com

Company Profile

Prima Foam. Located in The Second Industrial Zone . sector (8) Kom Ashim - Fayoum governorate. And away from Cairo about 40 km.com Ashim industrial zone is characterized as one of the first industrial zones set up in north in addition to its proximity to the capital.

Prima Foam Company was founded in 2008 by a group of foam industry experts in Egypt and established for the purpose of making thermal insulation foam panels (E PS& XPS) and also packaging products that manufactured from polystyrene material.

Prima Foam company starting its production by the end of 2012.
By 2014, according to an investment's plan placed previously , we added a new line to produce packaging foam that is a real addition to the investments and the growth of the company.

Because we have long experience in dealing with advanced production technology. As well as a leadership position in dealing with our customers. that ensures the continued growth and gain positive experiences in Prima Foam.

Prima Foam manufacturing a variety of slides (panels) for various specialized applications including insulate walls and ceilings and concrete spacers granules crushed foam packaging containers and also fish, vegetables and fruit. In addition to foam packaging equipment and products of different templates

Our customers are partners in success

نبذه عن الشركة

بريما فوم . تقع بالمنطقه الصناعيه الثانيه . قطاع ٨ بكوم أوشيم – محافظه الفيوم . والتي تبعد عن القاهره الكبري بحوالي ٤٠ كم . وتتميز منطقه كوم أوشيم الصناعيه بأنها من أوائل المناطق الصناعيه التي أقيمت بشمال الصعيد بالاضافه إلي قربها من العاصمه.

تأسست شركه بريما فوم عام ٢٠٠٨ بجهود مجموعه من خبراء صناعه الفوم في مصر وأنشأت بغرض صناعه ألواح فوم العزل الحراري (E P S & X P S) وأيضا منتجات التغليف والتعبئه المصنعه من ماده البوليستايرين .

بدأت شركه بريما فوم طرح إنتاجها بالأسواق نهايه عام ٢٠١٣ . وبحلول عام ٢٠١٤ ووفقا لخطه إستثمارات وضعت مسبقا أضيف خط جديد لإنتاج وكبس فوم التغليف والتعبئه يمثل إضافه حقيقيه لإستثمارات ونمو الشركه.

ونظرا لما يتمتع به القائمون علي العمل بشركه بريما فوم من خبرات طويله في التعامل مع التكنولوجيا المتقدمه لعناصر الإنتاج . وكذلك الرياده في التعامل مع عملائها . فأن ذلك يضمن إستمرار النمو وإكتساب الخبرات الإيجابيه في بريما فوم.

تقوم بريما فوم بتصنيع مجموعه متنوعه من الشرائح (الألواح) للتطبيقات المختلفه والمتخصصه بما فيها عزل الحوائط والأسقف والفواصل الخرسانيه وحبيبات الفوم المجروش وأيضا عبوات تعبئه الأسماك والخضروات والفاكهه . إضافه إلي قوالب فوم تغليف الأجهزه والمنتجات المختلف

عملاؤنا شركاء في النجاح

Prima FOAM

PRIMAFOAM WARM WALL Basis - The standard façade with EPS insulation boardsam

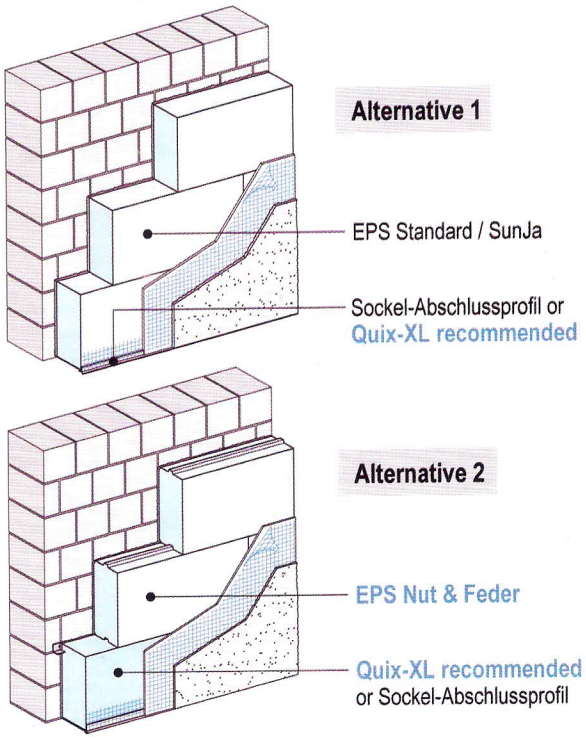
WARM WALL Basis - the standard façade with EPS insulation boards - is a building authority approved External Thermal Insulation Composite System (ETICS) for new and existing buildings with insulation material made of expanded polystyrene. The façade insulation boards are bonded to the substrate using an adhesive and anchored with dowels if required.

Alternative 1:
Façade insulation boards with square edge type.

Alternative 2:
Façade insulation boards with tongued and grooved edges on the longitudinal edge for a secure and quick bonding of the insulation board with a flat surface. The mortar pockets on the rear of the board avoid thermal bridges, as the adhesive does not enter the insulation board joints.

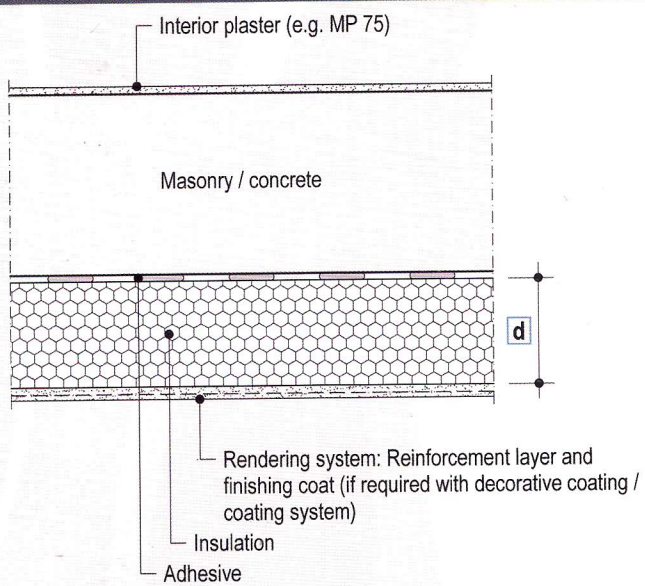
Properties :

- ETICS: Building material class B1 or B2 according to DIN 4102-1
- Approved insulation thickness up to max. 400 mm

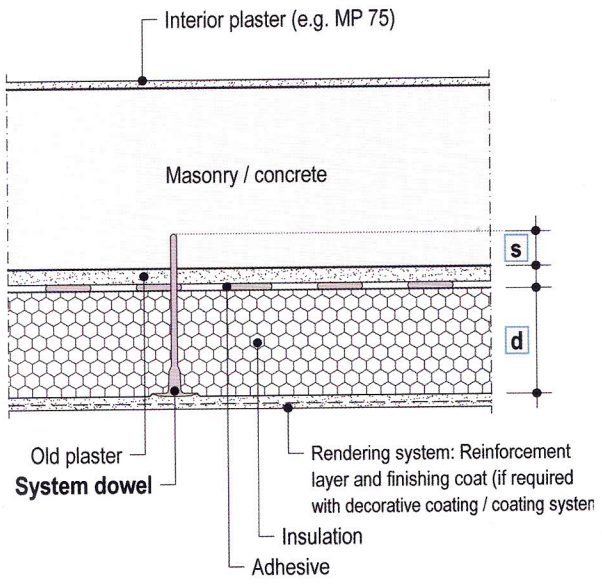


System configuration

New building



Existing buildings



t = Insulation thickness (see page 7 - 8); s = Anchoring depth (see page 32)

On practically new and standardized substrates without plaster (masonry and concerte), application of dowels is unnecessary; bonding with adhesive is sufficient (Notes on doweling: see page 31 - 34).

Building physical requirements must be considered and verified in detail

- Before ETICS are installed, the stability of the existing wall must be inspected. The proof of stability includes all load-bearing and any existing attached elements.
- Thermal bridges must be avoided - see DIN 4108 Amendment 2.
- Careful application, particularly with the connections is of utmost importance

Prima FOAM

ROOF INSTALLATIONS

EPS is moisture resistant and retains it's thermal properties.

EPS styFRene as specified by EPSASA, contains a Flame Retarding Additive, which is specially formulated to restrict the extent of burning. Unfaced EPS styFReneTM is classified B/B1/2/HV by SANS 428 when tested, in accordance with SANS 10177 Part 11 test method.

Expanded Polystyrene (EPS) insulation when installed is effective in reducing the thermal transmittance in the flat and pitched roof applications.

WALL INSTALLATIONS

Construction:

In the construction business, EPS sheets and boards are used for thermal insulation in walls, roofs and on floors, while loose beads can be used as an aggregate in lightweight concrete, plasters and renderings. Other uses include under floor heating systems, drainage boards, permanent formwork, foundation and prefabricated walls.

EPS is compatible with cement, concrete, brick, masonary, mortars, plaster and bitumen based damp proof membranes.

EPS is rot proof and durable. When installed as recommended, EPS will remain effective as an insulant for the life of buildings and structures.

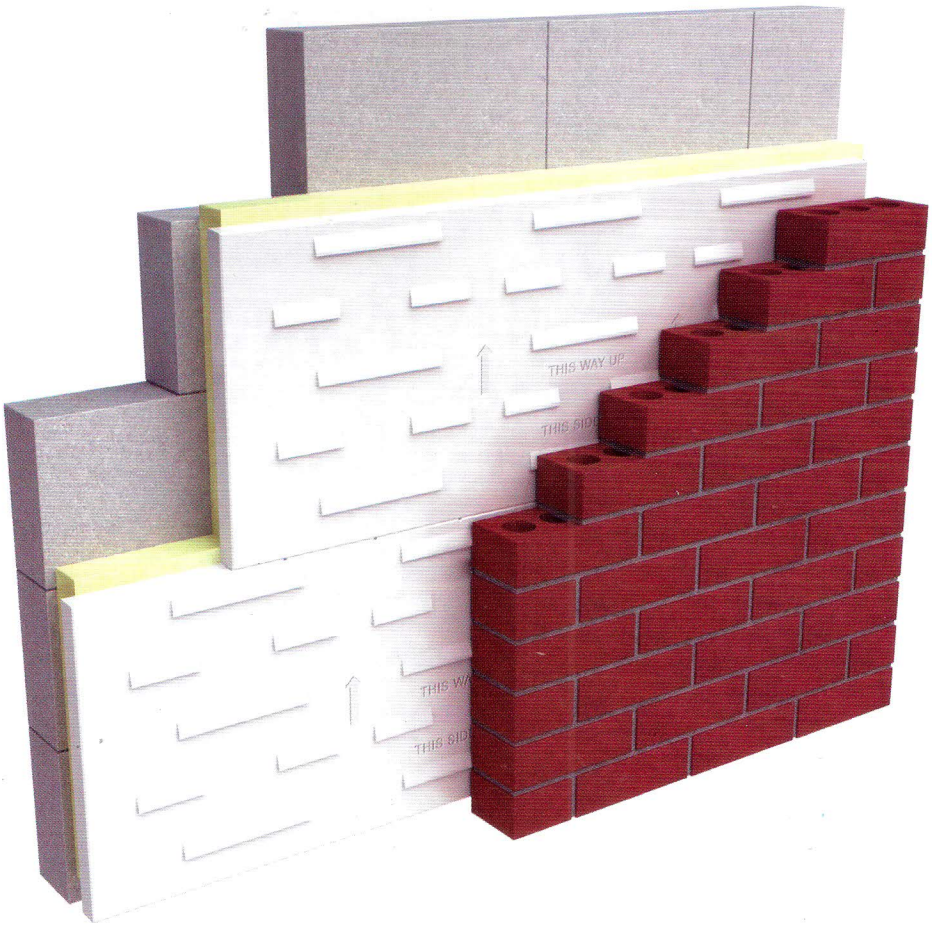
FLOOR INSTALLATIONS

A substantial amount of heat is lost through an un-insulated slab, resulting in cold, uncomfortable floors.The most common EPS insulation is used on a concrete sub-floor or as a floating screed.

The overlay to the EPS Boards should be:

1- A cement-based floor screed laid in accordance with the relevant clauses of SANS 10109 Part 2.

2- A concrete slab in compliance with SANS 1879 Precast concrete suspended slabs.

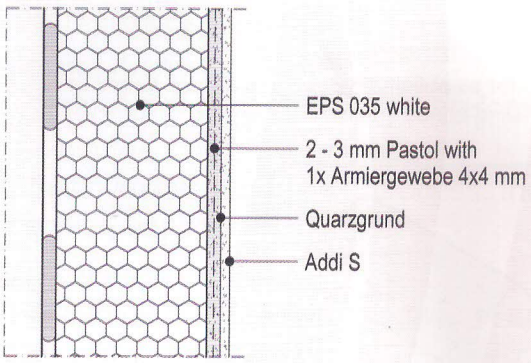


WARM WALL Basis

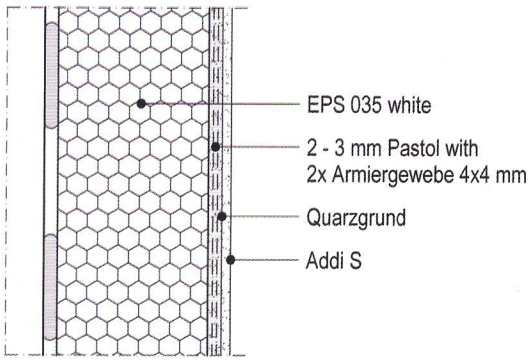
Impact resistance - Tested following the ETAG 004

Organic system alternative - partial application in areas prone to impacts

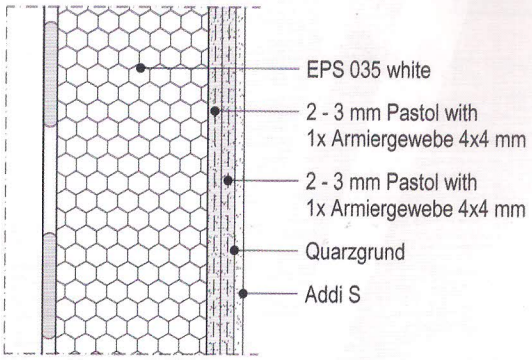
Up to 20 Joules



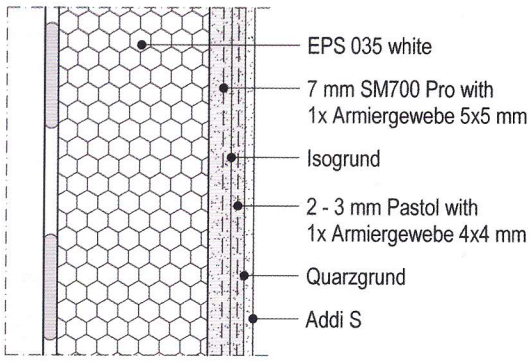
Up to 45 Joules



Up to 55 Joules



Up to 60 Joules



Prima FOAM

WARM WALL Basis

Method for determination of wind loads

Simplified method

In accordance with DIN 1055-4, the simplified method can be used for a building up to a height of 25 m, provided that it is situated on flat terrain up to a height of 800 m above sea level. The height/width ratio must be 2.0.

Standard method

For buildings exceeding 25 m in height, a proof in accordance with the standard method acc. to 1055-4 must be provided.

Practice-oriented method

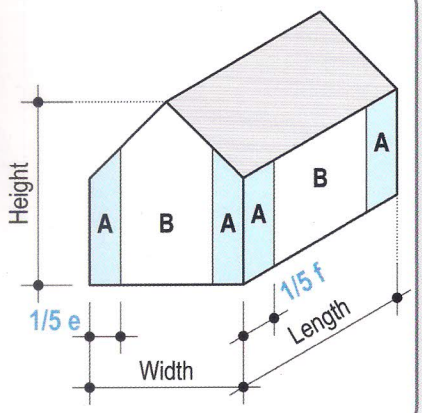
Suitable for all building types up to a max. height of 25 m in wind zones 1 to 3.

Simplified method

Width of fringe A:
1/5 e or 1/5 f

e = 2 x height *or* e = length
f = 2 x height *or* f = width

The smallest corresponding value is decisive



User benefits

Excellent thermal insulant

EPS is 98 percent air, and is therefore an excellent thermal insulant.

Proven acoustic insulant

EPS absorbs sound, both impact sound in floating floors and airborne sound for walls.

Moisture resistant

EPS resists degradation by water.

Lifetime durability

EPS does not decompose. It therefore provides lifetime durability.

Flexible mechanical properties

With its flexible production process, the mechanical properties of EPS can be adjusted to suit every specified application.

Versatile

EPS can be manufactured in almost any shape or size, and is compatible with a wide variety of materials.

Cost-effective

EPS offers the best price/performance ratio compared to any other insulation material.

Easy to transport

EPS is almost as light as air, so it saves fuel in transport .

Easy to install

EPS is light, practical, safe and easy to handle and install.

Fire retardant

In addition to 'standard EPS' there is also a 'self extinguishing' version that includes a fire retardant.

Fire retardant

In addition to 'standard EPS' there is also a 'self extinguishing' version that includes a fire retardant.

Environmental benefits

Extremely safe

EPS is non-toxic and totally inert. It contains no Chlorofluorocarbons (CFCs) or Hydrofluorocarbons (HCFCs), and never has at any time during its life-cycle. It is also totally absent of any nutritional value, so no fungi or micro-organisms can grow within EPS.

Recyclable

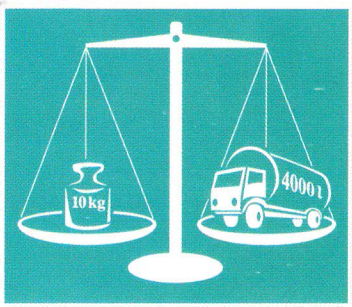
EPS can be recycled in many ways once it comes to the end of its life. These include recycling directly intonew building products and incineration to recover its inherent energy content. The choice of a recycling method is based on technical, environmental and economic considerations.

Health Aspects

EPS presents no dangers to health in installation and use.

Fulfils all fire ane safety requirements

All EPS bullding applications, as promoted by the European EPS Industry, fulfil local regulations in every European country.

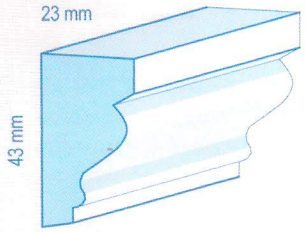


10 kg of EPS saves 4000 litres of oil over a 50 year period.

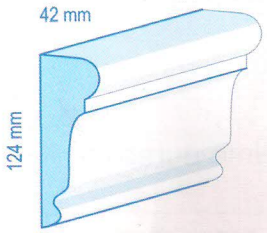
Prima FOAM

WARM WALL Basis

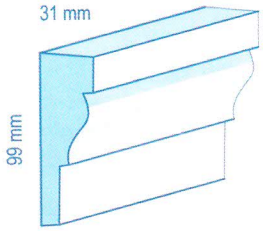
Product range



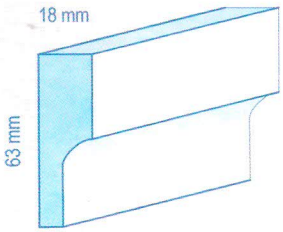
Cornice profile OD01



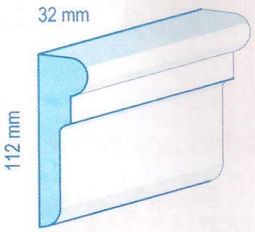
Cornice profile OD03



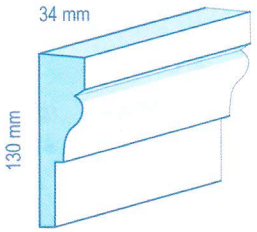
Cornice profile OD05



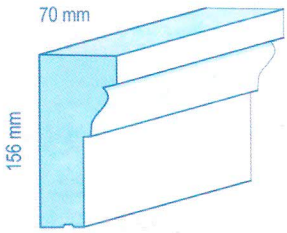
Cornice profile OD17



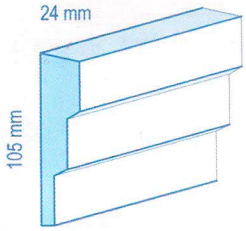
Cornice profile OD18



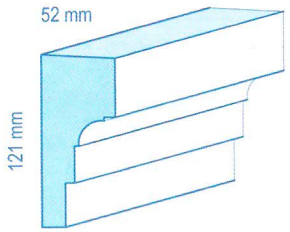
Cornice profile OD22



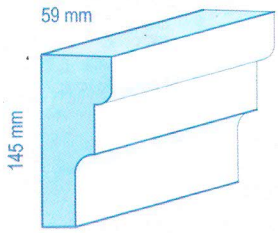
Cornice profile OD27



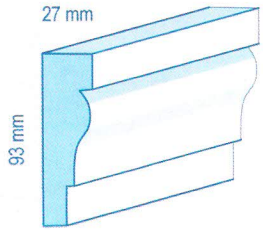
Cornice profile OD34



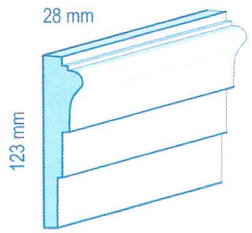
Cornice profile OD47



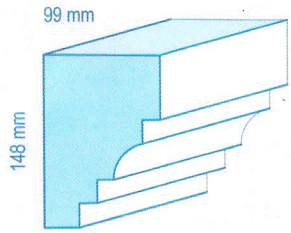
Cornice profile OD50



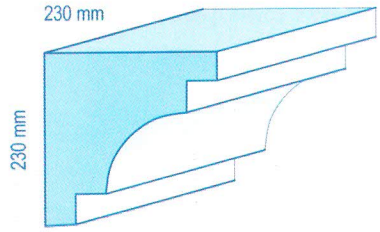
Cornice profile OD57



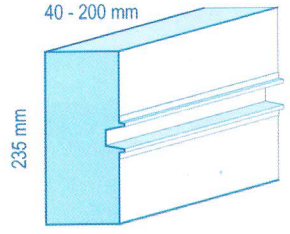
Cornice profile OD58



Cornice profile OD66



Cornice profile OD125



Ashlar profile BF

Prima FOAM

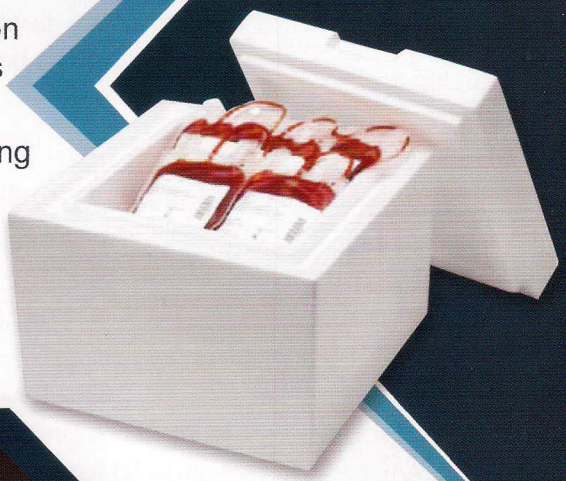
Primafoam

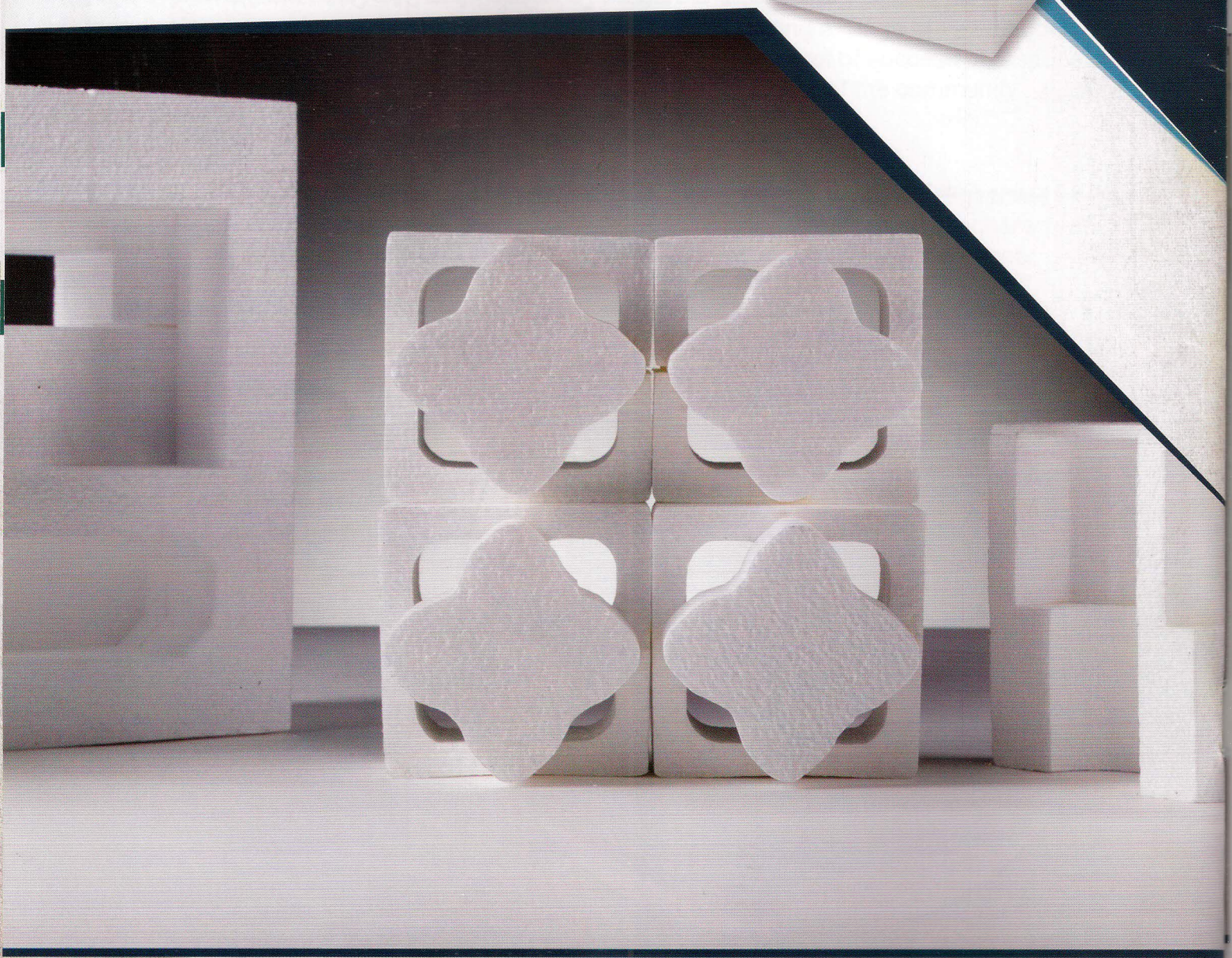
we understand that consignment integrity is of paramount importance in medical and healthcare chill-chain logistics and in the transportation of fragile and temperature sensitive food products.

As Australia's largest expanded polystyrene manufacturer, our advanced design and production facilities in each state have the capability to produce innovative packaging solutions to your specific brief, ensuring that your business meets the complex regulations that govern the way medicines and food products are stored, packed and delivered.

Primafoam Environmental EPS is a simple and ingenious solution to cold chain ackaging as it combines two brilliant characteristics of EPS – Insulation and Shock Resistance.

The high quality Primafoam PharmaSafe and FoodSafe packaging containersoffer exceptional value for any application requiring economical insurance against both thermal and physical impact Primafoam PharmaSafe and FoodSafe packaging is a clean, biologically inert product with a high quality appearance which enhances product appearance.



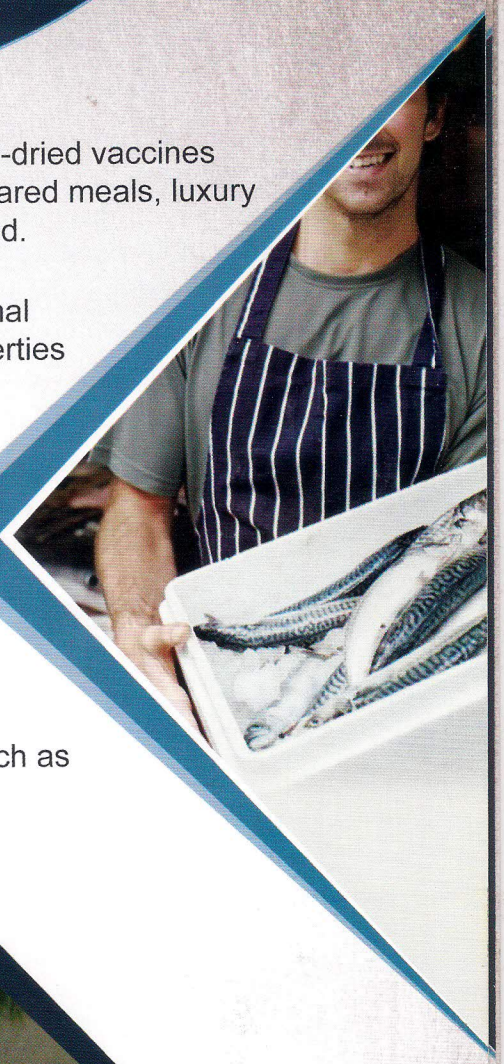


Prima FOAM

Designed Around Your Product

Whether you require air freight approved shipping units that hold freeze-dried vaccines together with dry ice, moulded containers for home delivery of pre-prepared meals, luxury ice-cream or delicate fruits, can provide the packaging solution you need.

Custom designed lightweight Primafoam PharmaSafe and FoodSafe EPS Packaging is made to your exact requirements. Outstanding thermal insulation, exceptional impact and shock protection and durability properties ensure that your products arrive at point of use in the best condition.



Designing and Testing EPS Packaging

PRIMAFOAM can design and manufacture a specific pack to suit your special needs. With our knowledge of the requirements of your product we can design the size, weight and shape around your product. We will then have tools manufactured to make your new pack. PRIMAFOAM can also test your product for strength in both static load and also through use of standard drop tests. is the only EPS producer in Egypt with an approved Air Freight Drop Test facility. Other important tests such as oscillating table and transport simulation can be arranged through at approved testing laboratories.

Prima FOAM

Maintaining Shipment Temperature

Life-critical medications and vaccines can be rendered ineffective or even harmful if recommended temperature parameters are not met during transportation. The high thermal insulation and moisture resistance properties of PRIMAFOAM EPS deliver peak performance at any temperature. Chilled goods stay chilled. Temperature sensitive products stay within the desired temperature range.

Protecting Your Valuable Goods

The exceptional shock absorbing characteristics of PRIMAFOAM PharmaSafe and FoodSafe packaging results in less damage to high value products on their journey through the supply chain. EPS packaging absorbs impact blows, maintaining consignment integrity.

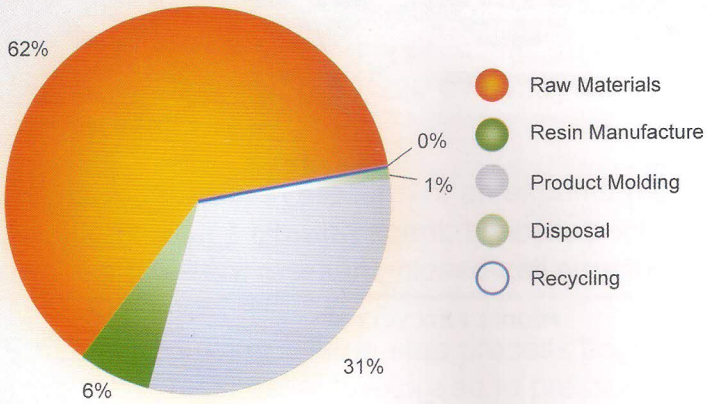
Increasing distances between suppliers and customers require more exacting properties of packaging products. PRIMAFOAM PharmaSafe and FoodSafe packaging are the perfect choice in this global environment. PRIMAFOAM PharmaSafe and FoodSafe packaging is not damaged by ambient moisture, damp or heat and continues to protect your valuable products in Australia's harshest external conditions.

Prima FOAM

Expanded Polystyrene Packaging Environmental Profile Analysis

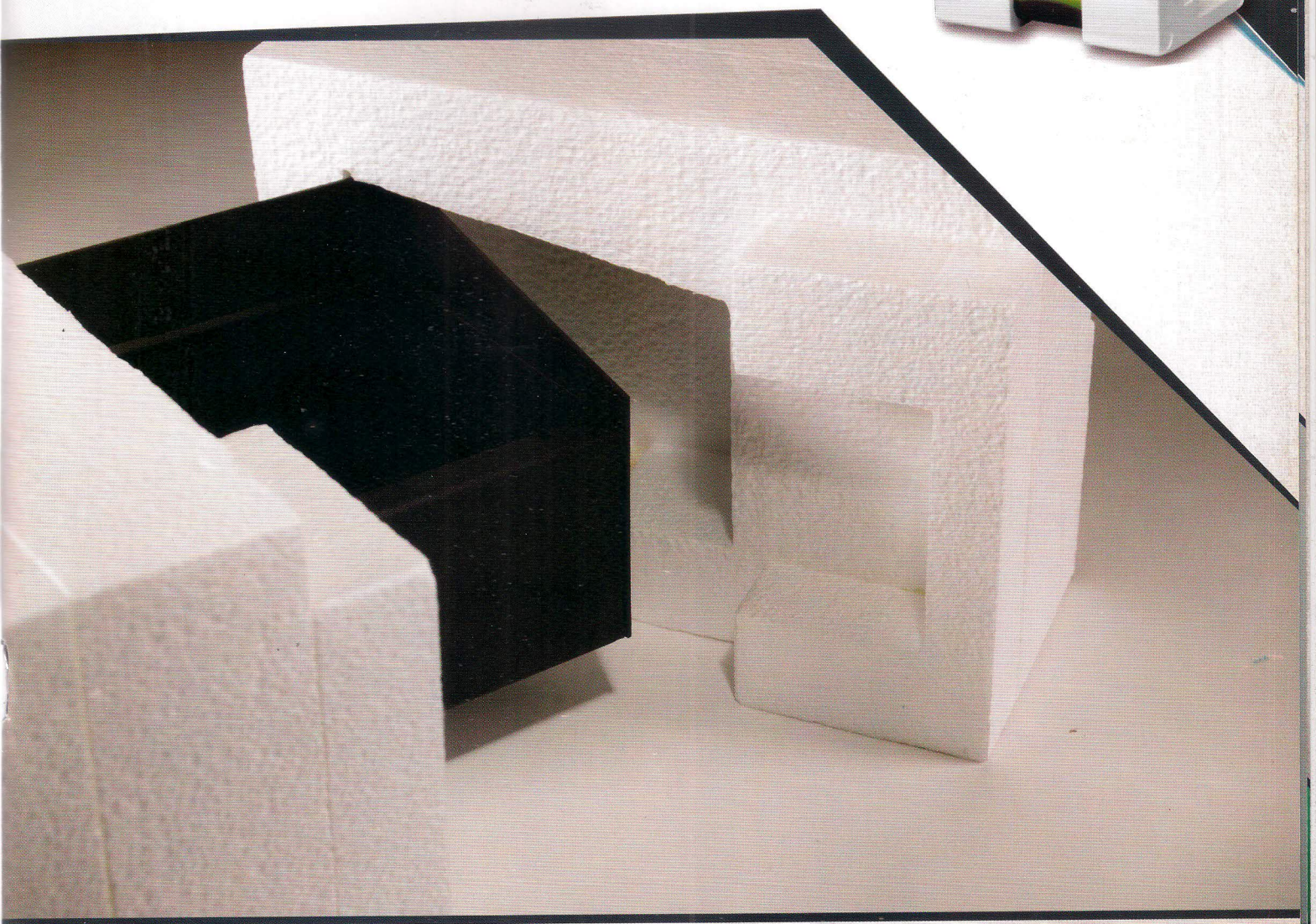
A presentation of quantified environmental life cycle product information for expanded polystyrene (EPS) packaging systems.

Energy Requirements by System Component at Current Average of 10% Recycling



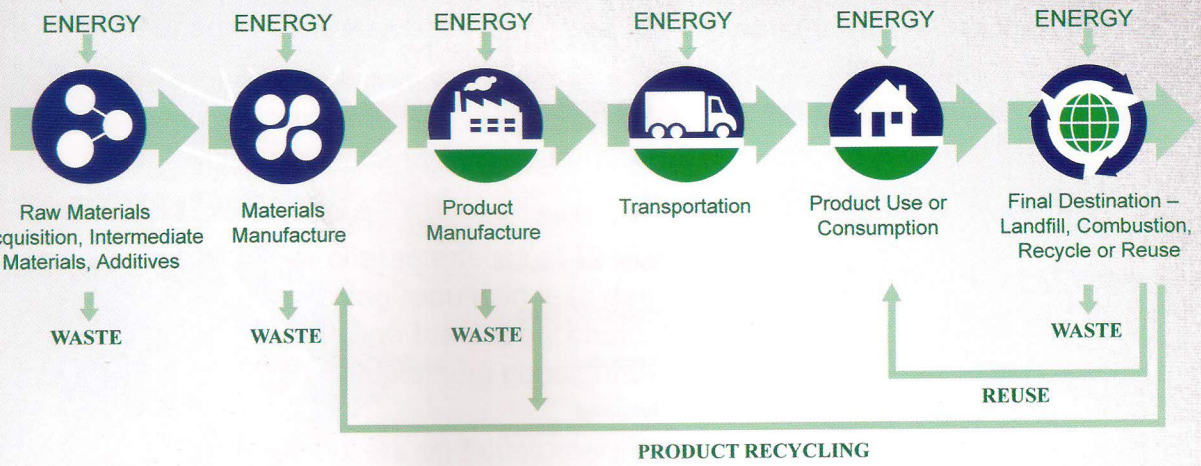
EPS Life Cycle Inventory

The EPS Resource & Environmental Profile Analysis quantifies the resource use, energy use and environmental emissions associated with the product life cycle system. The unique feature of this type of analysis is its focus on the entire life of the product, from raw material acquisition, to processing, transportation and final disposition. An LCI quantifies



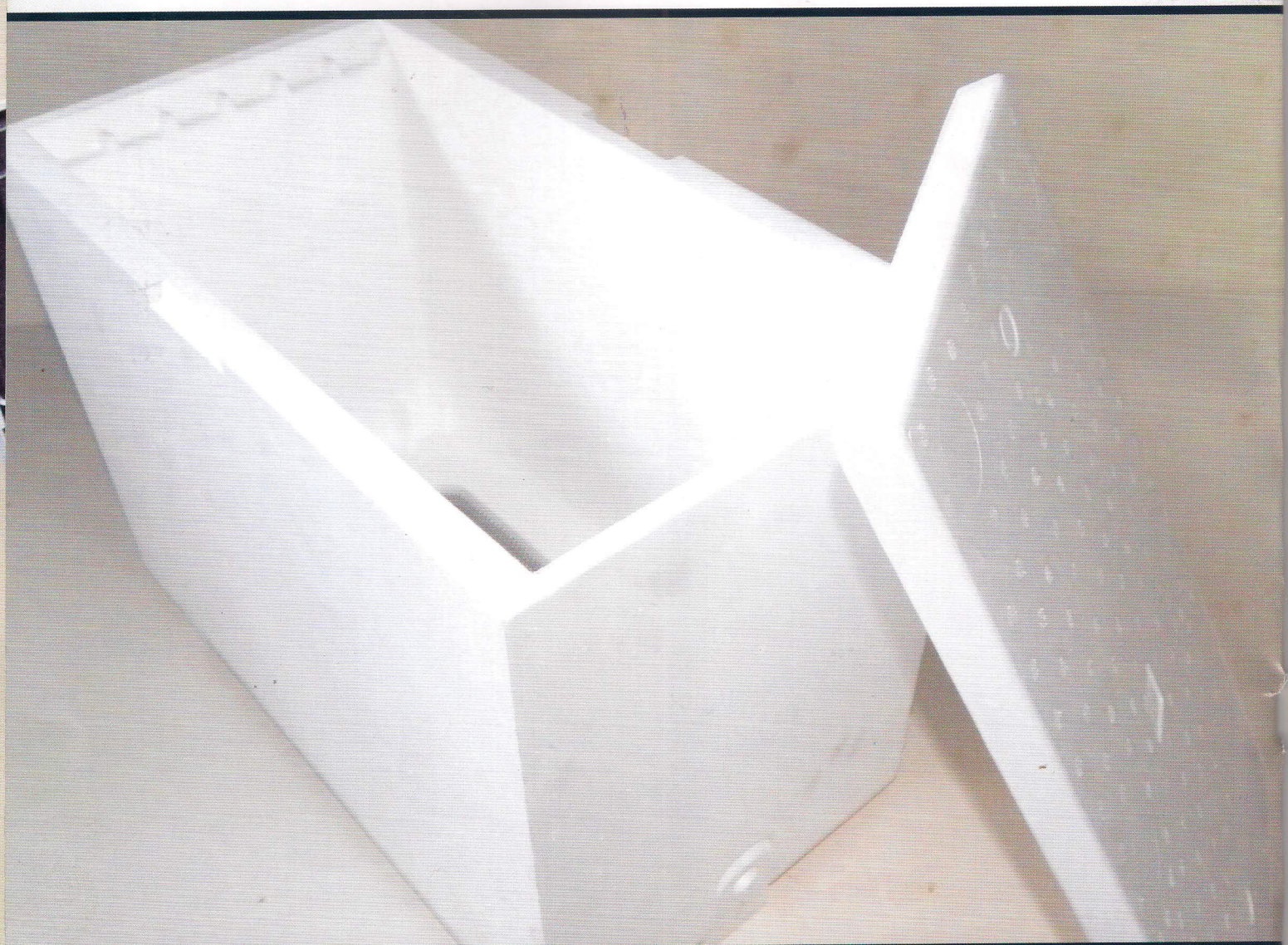
Prima FOAM

General Materials Flow for "Cradle-to-Grave" Analysis of a EPS Packaging.



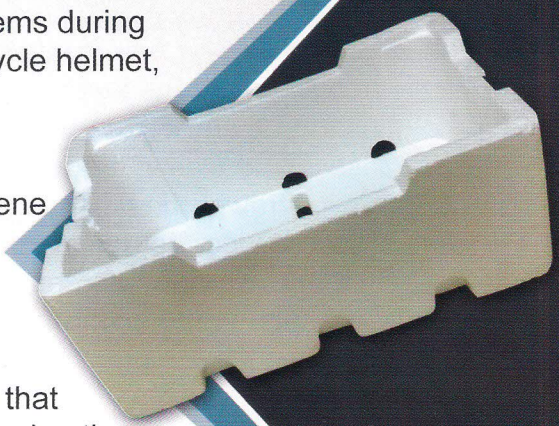
Expanded Polystyrene

Expanded polystyrene (EPS) is a generic term for polystyrene and styrene copolymers that are expanded into a variety of useful products. The shock absorption properties and other qualities of EPS foam, combined with customized molding capabilities, insulation properties and ease of processing make it a high performance packaging material.



Expanded Polystyrene

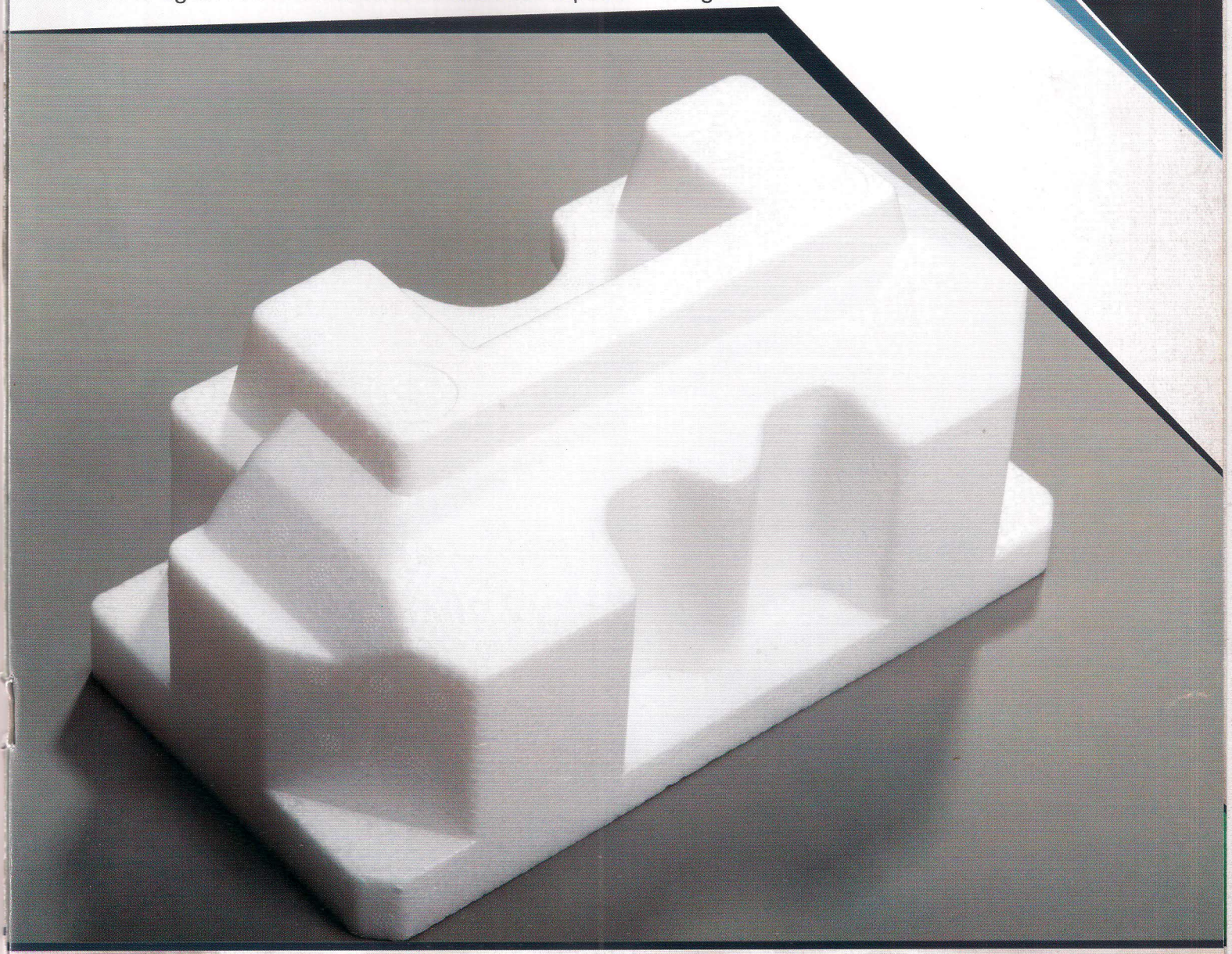
Used in thousands of different ways by individuals and businesses around the world, expanded polystyrene (EPS) is relied upon to provide superior performance in various foam product applications. As a closed-cell, rigid foam plastic, EPS relies on the use of a blowing agent to allow individual beads to be expanded from 2 to 50 times their original size. Whether used as protective packaging for fragile items during shipment, as insulation in building applications, or even as a bicycle helmet, EPS is serving an important role in our everyday lives.



Material Declaration

EPS feedstock is supplied in the form of an expandable polystyrene pellet impregnated with a blowing agent; typically pentane. The final product is a moisture resistant, closed-cell structure that is comprised of 90 percent air

EPS is manufactured using a three-step process beginning with pre-expansion. The resin pellet is exposed to pressurized steam that causes the polystyrene to expand to the desired density. Conditioning then allows the bead to achieve increased alasticity and greater expansion capacity. The final stage feeds the pre-expanded beads into a customized mold cavity where steam is again released to achieve the final expansion stage



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EPS and the Environment

Manufacturing EPS packaging uses the clean technology of steam and the water is reused many times. It does not generate waste material as all cut-offs or rejects are broken up and put back into the process.

EPS does not, and never has, contained or used in its manufacture, CFCs or HCFCs, both of which diminish the ozone layer.

Styrene is used to manufacture EPS packaging. It has been used in the manufacture of a wide range of plastics and plastic products for more than 60 years. Styrene also exists naturally and can be found in strawberries, beans, nuts, beer,wine, coffee beans and cinnamon.

Pentane is used during the manufacture of EPS packaging; it belongs to the same chemical family as methane, propane and butane. Pentane is not considered to be a substance hazardous to health or the environment by European authorities.

Like other plastics, EPS is obtained from oil. The diagram, 'Efficient Uses of Natural Resources' shows

that total consumption of oil is accounted for as follows: 35% heating, 29% transport, 22% energy production, 7% various and 7% petrochemicals with 4% of that used for plastics. EPS itself accounts for 2% of all plastics, so only 0.1 % of oil is used to manufacture EPS.

EPS packaging makes a positive contribution to sustainability and the environment:

SOLARISATION of Expanded-Polystyrene Seedling Trays

INTRODUCTION

Tobacco growers world-wide produce nursery transplants in 'float' systems which replaced production in soils fumigated with the ozone-depleting fumigant methyl bromide (MB). The system utilises expanded polystyrene (EPS) trays seeded with tobacco and floated on acommon pool of water within polyhouses. Growers re-use their EPS-trays as many timesas possible to minimise cost and waste disposal issues. As EPS-trays age and deteriorate their potential to harbour propagules of tobacco pathogens (eg Rhizoctonia, Pythium, and Fusarium spp.) increases. To manage the risk of disease occurring in the float system,Egypt growers fumigated their used EPS-trays with MB, until its phase-out in 2005.This research investigated the integration of nonchemical systems such as solarisation for disinfestation of used EPS-trays.

METHOD

Three field trials were conducted in Myrtleford and Knoxfield Victoria, Australia,over two summers to determine the potential for utilising polyhouses and thermal radiation from the sun (solarisation) to disinfest EPS-trays. In this procedure trays were wrapped in transparent, low-density polyethylene (25 µm thick) and placed onto black plastic in polyhouses for periods of up to 6 weeks. EPS-trays used in the trials included: (a) washed and non-washed used trays, (b) new trays artificially inoculated with sclerotia and mycelium of Rhizoctonia solani and (c) non-solarised trays formed the control. Temperatures in ambient air, the polyhouse and on the surface of the trays were recorded. Trays were retrieved weekly during the solarisation period, and pathogen viability and fungal populations on them were determined using cultural and dilution techniques.

Expanded polystyrene trays

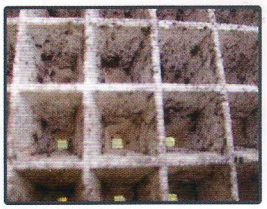

Fig.1 Used EPS tray containing residual substrate & root material from the previous crop

Fig.2 A new tray cell is easily damaged by seedling roots and propagating material

Fig.3 Microscopic view of tray cell surface that can harbour fungal pathogens of tobacco

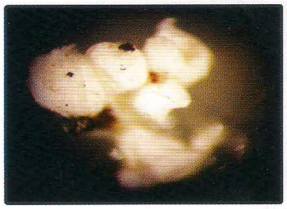

Fig.4 EPS tray fragment with sclerotia of Botrytis cinerea

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SOLARISATION of Expanded-Polystyrene Seedling Trays

RESULTS

- The maximum temperature recorded on solarised EPS-trays was 75°C which was 20°C above that in the polyhouse and 40°C above ambient air temperatures. Over a 6-wk solarisation period, tray surfaces accumulated more than 150 hours above 50°C (Fig. 9).This heat exposure was well above that required to kill many pathogens with solarisation in soil.
- Six-weeks of solarisation reduced fungal populations on used EPS-trays to undetectable levels for nonwashed trays (Fig 10) and killed both sclerotia and naked mycelium of R. solani.
- Washing trays prior to treatment reduced initial fungal populations by 10-fold, and lowered the solarisation period required for effective disinfestation by 4 weeks.
- In a separate trial, continuous solarisation of used EPS trays for up to 10 months did not affect their physical dimensions, although minor discoloration was observed.

DISCUSSION

Solarisation of used EPS-trays allows tobacco growers to utilise their polyhouses during the off season (summer) and is a cheap and energy-efficient alternative to MB and steam fordisinfestation. Furthermore, there are no issues with residual chemicals on trays that sometimes caused phytotoxicity in tobacco seedlings. This result was equivalent to the efficacy recorded previously for MB and steam disinfestation of trays, and superior to that with biocidal dips and some alternative fumigants. The success of solarisation in Australia may offer an alternative to MB for disinfestation of used EPS-trays in float systems world wide.

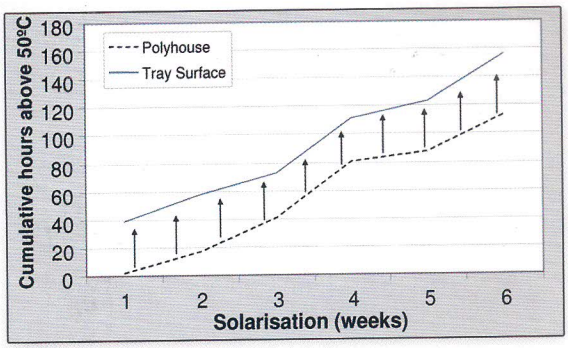


Fig.9 Cumulative hours above 50°C measured on the surface of solarised EPS-trays under plastic and in the polyhouse containing them over a 6-week period in summer

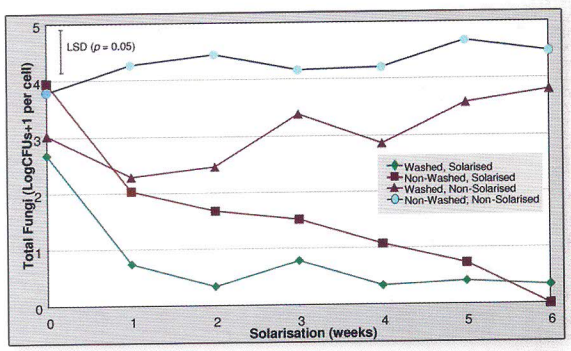


Fig. 10 The effects of solarisation & washing on populations of total fungi on EPS-trays over a 6-week period in summer

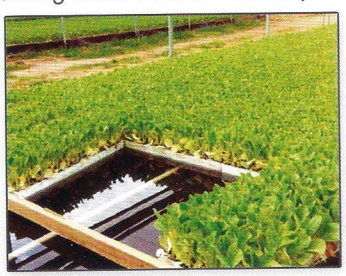


Fig.5 EPS-trays containing tobacco seedlings in the float system

Fig.6 Solarising EPS-trays in the polyhouse. Trays wrapped as single layers were thoroughly disinfested.

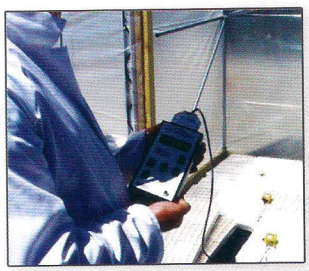
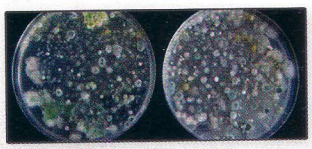
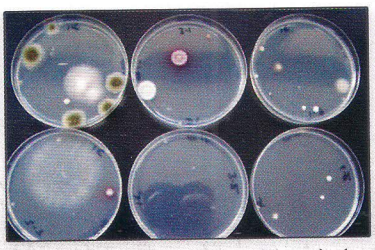


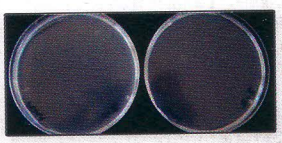
Fig 7 Monitoring UVA – UVB on solarising EPS-trays



Used trays pre-solarisaton



Used trays solarised week 1



Used trays solarised week 5

Inoculated pieces solarised week 4

Washed used trays solarised week 1

Fig. 8 Fungal populations recovered from used EPS- trays following solarv

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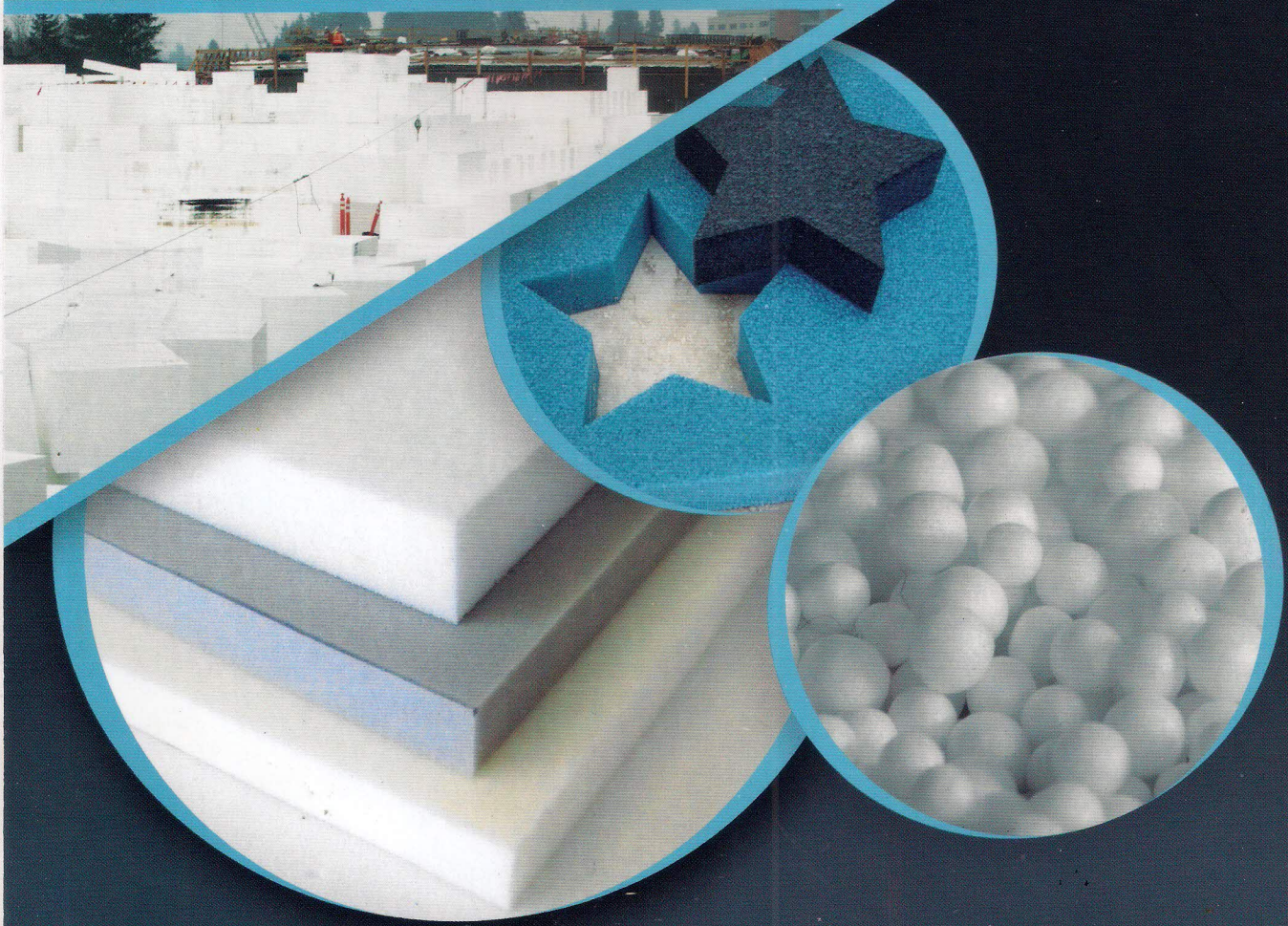

El Fayum - Kom Oshim- industrial zone- second stage- sector (8)
Tel. : (002) 015 377059 - (002) 015 366586
Mob.: (002) 01025929230 - (002) 01025929055