

ECO FOAM

green insulation

EN



ECO FOAM

In the web www.cheersystem.com



CHEER SYSTEM
INTERNATIONAL (THAILAND) LIMITED.



Eco Foam Extrude polystyrene

“Sprayed” extruded polystyrene, is a high quality product designed and developed by Cheer System International (Thailand) Co., Ltd., processed to keep cells as close to each other as possible - this makes a difference from other polystyrene products that have large spaces between cells. Extruded polystyrene is easy to install and has excellent resistance to moisture.

ECO FOAM, a polystyrene which is resistant to water and compression, has been widely recognized among construction works. Concerning the importance of environmental conservation, Cheer System makes this product to be 100% reuse or recycle. The product helps saving energy for different purposes such as industrial or residential applications and suits to various usage such as attic insulation, ceilings, floor insulation, cold rooms, road construction, flooring to prevent collapse and keep the temperature and make the floor more flexible.

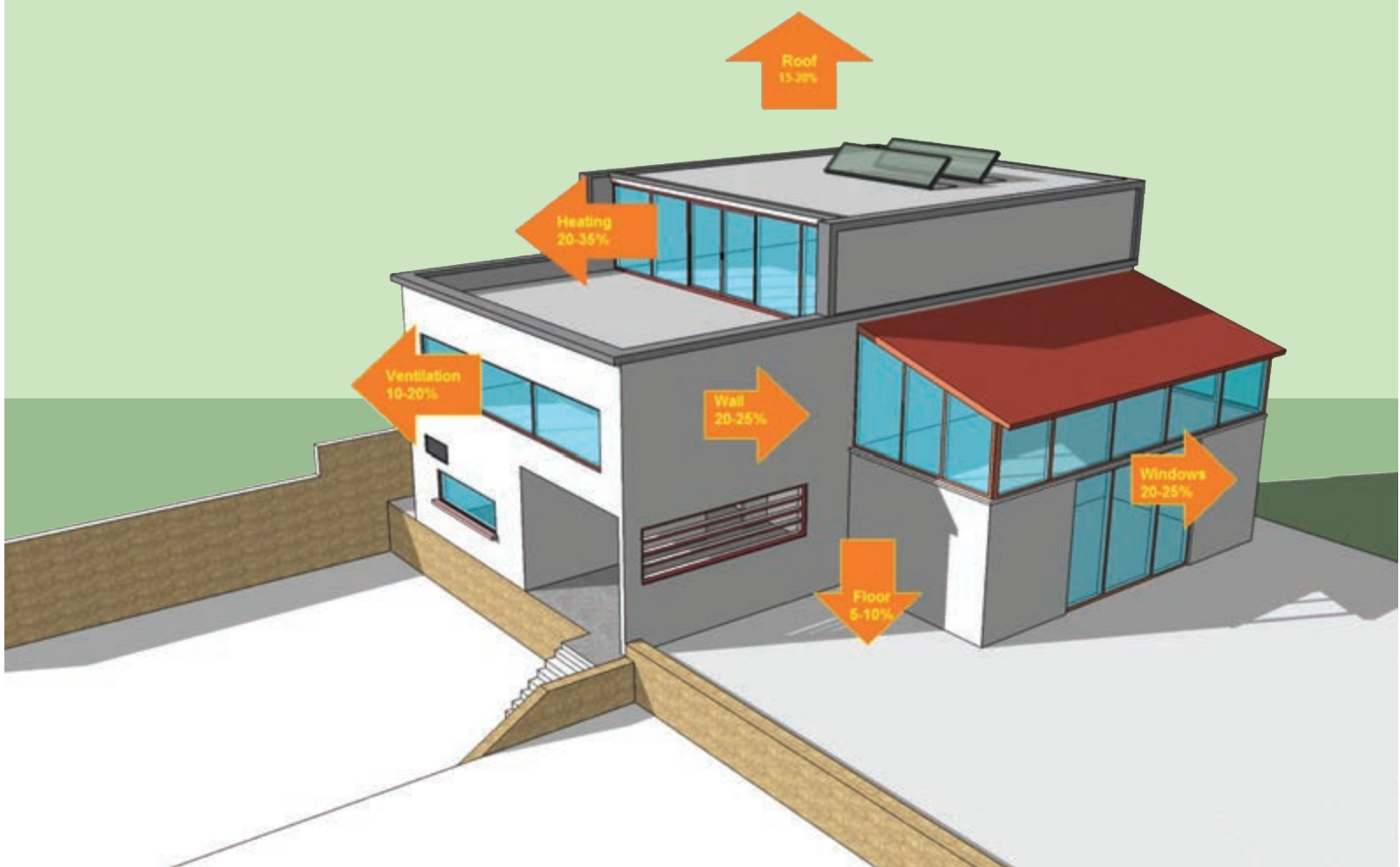
CHEER SYSTEM
INTERNATIONAL (THAILAND) LIMITED.



THE PERFORMANCE OF THE INSULATION. CAN SAVE MONEY. AND ENVIRONMENTAL PROTECTION.

Heat Insulation

Choose the right product to protect yourself from the heat; Eco Foam the insulation which helps reduce releasing CO₂ to the atmosphere.



CHEER SYSTEM
INTERNATIONAL (THAILAND) LIMITED.

THE INTELLIGENT ALTERNATIVE TO NEW

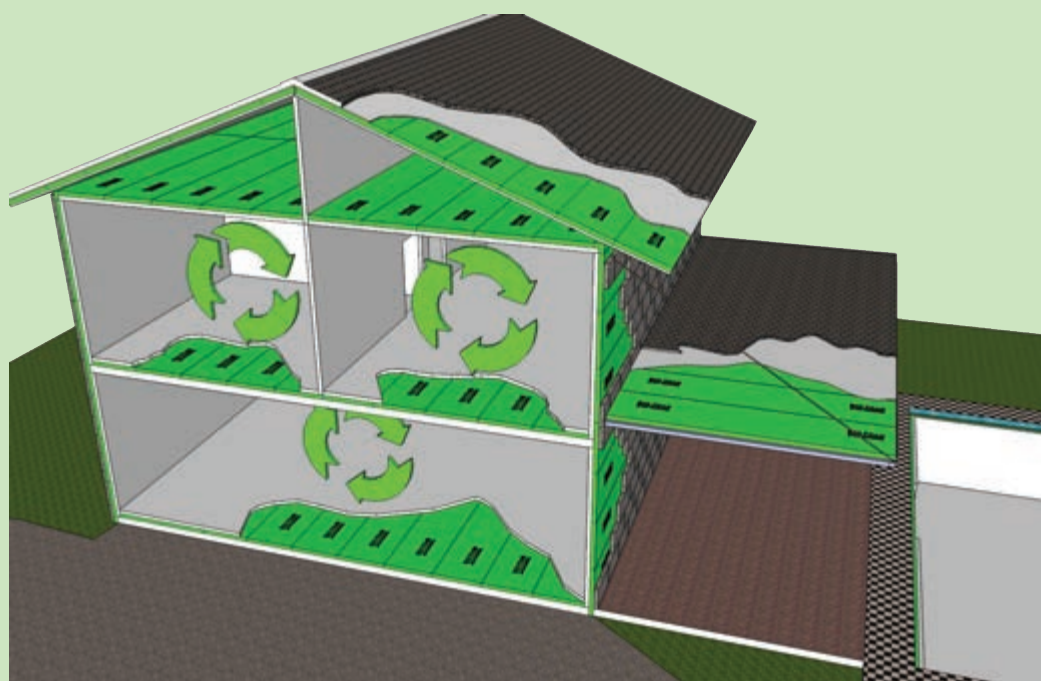


Materials for Engineers, architects

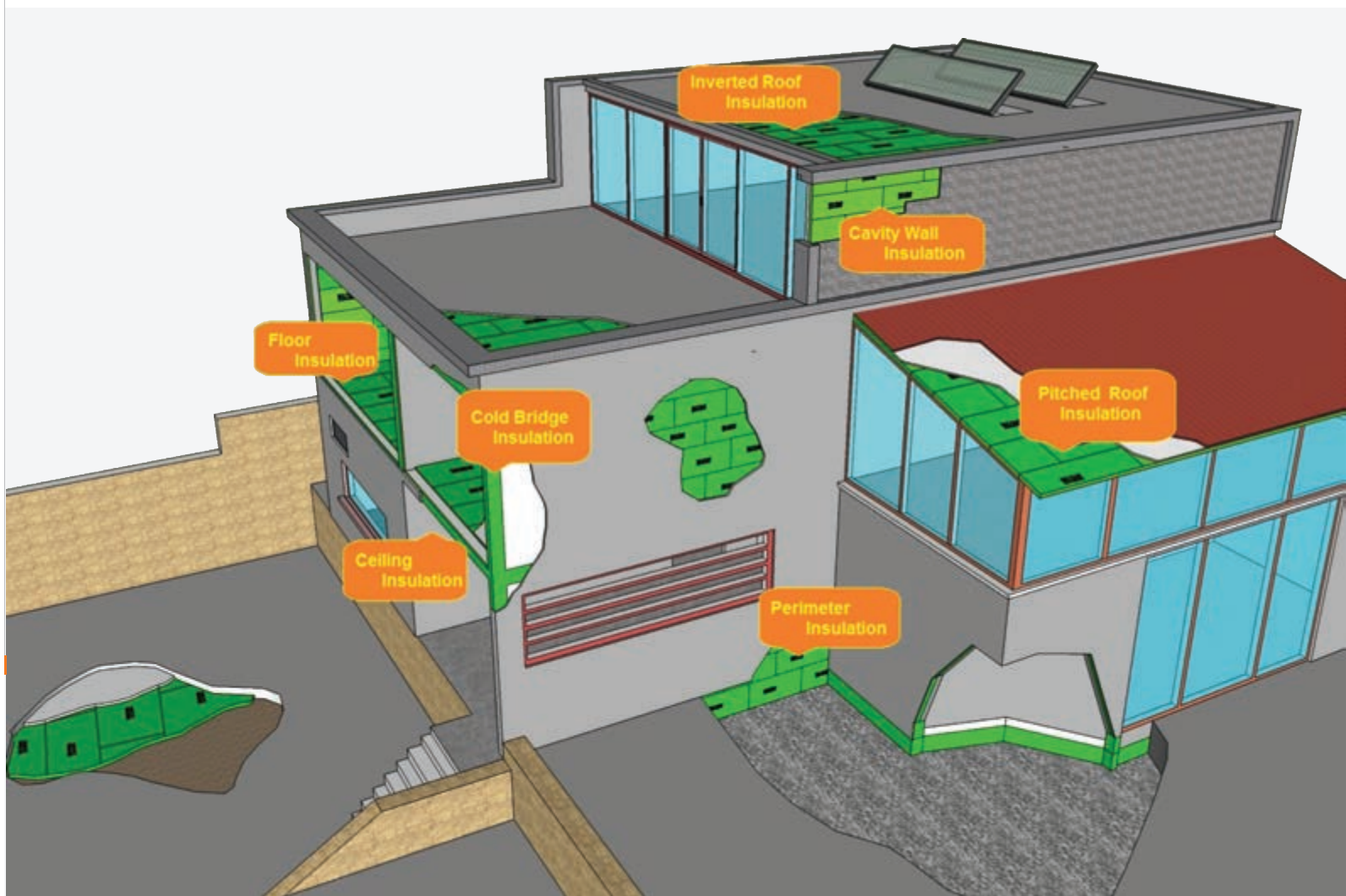
Builders or even general house owner everyone is looking for the material that use less energy life span, prevent water seepage environmental friendly, and the most important: good heat transfer reduction - all factors are in the "ECO FOAM".

A variety of solutions

The ECO Foam is a strong, lightweight, insulation with multiple usages. The product can be fixed for indoor and outdoor, protecting building from the heat. The installation is easy and quick and also comes with reasonable price.



Protect the environment, save energy, bring value to the



Perfect performance from floor to the roof.

Eco foam, an insulation that can full-fill the needs of varied usages applied to parts of the building with high pressure.

The product is strong and the outstanding property is water proof and thus preventing underground water.

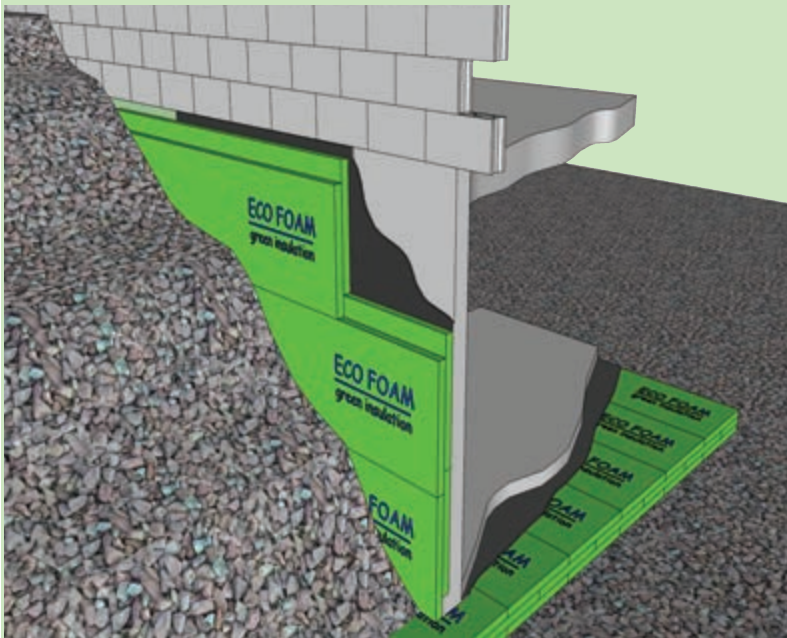
Also, Eco Foam is suitable for both indoor and outdoor work.

ECO FOAM
green insulation



CHEER SYSTEM
INTERNATIONAL (THAILAND) LIMITED.

Apply to different type of work

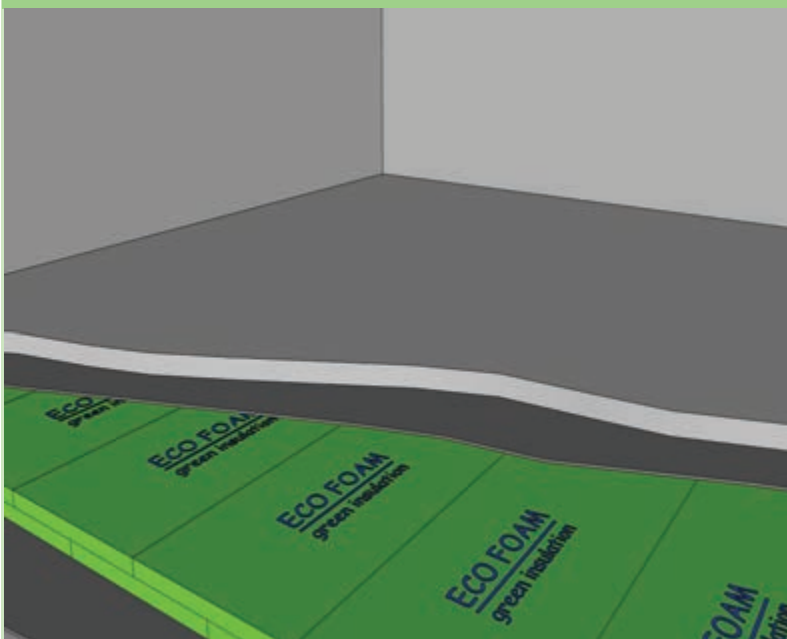


Advantages:

- Moisture resistant
- resistant for heavy loads (minimal compression)
- excellent heat transfer reduction

Basement insulation

Applying Eco Foam as a basement insulation to prevent damage from moisture, regarding the ground floor which will be connected to the soil. Also, Eco Foam remain temperature within the building with its strong resistance to moisture, heavy load, low thermal conductivity and long lasting performance. Eco Foam gives you the right solution for underground foundation to prevent problem arising from underground water.



Advantages:

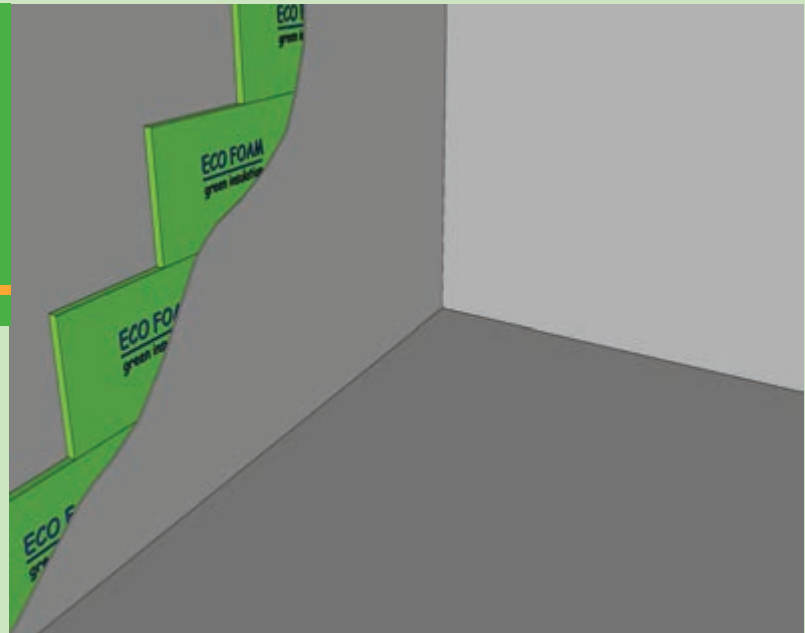
- strong
- resistant for high pressure
- resistant for heavy loads (minimal compression)

Foundation insulation

Because of the capacity of heavy load, Eco Foam can be installed prior to prevent the building from heat and moisture before fixing normal floor.

Internal insulation

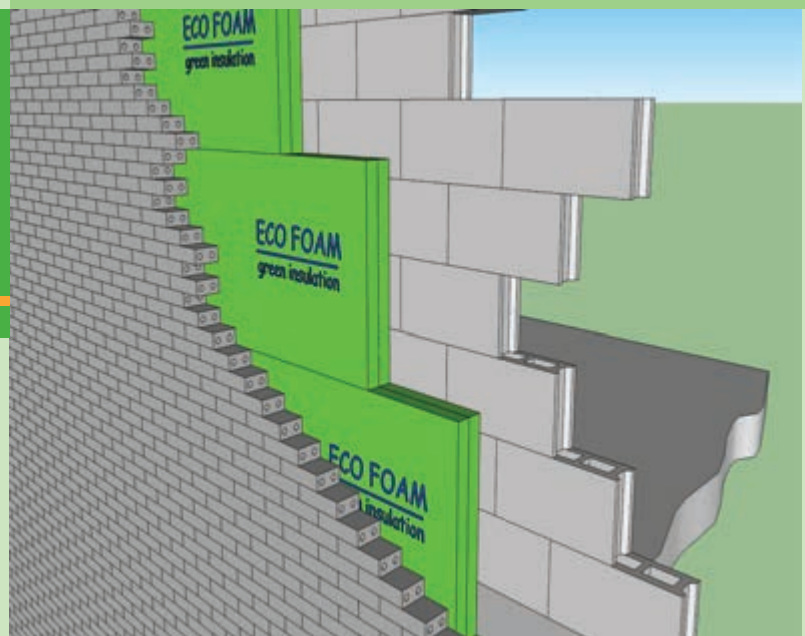
Our product is suitable for installation inside the building, if the condition doesn't allow installation outside property. The insulation can be installed inside within the wall of the building of different structure: outside surface can combine with concrete, cement or other material such as viva board, gypsum board, Formica, etc. This convenience will keep the cool temperature and save energy.



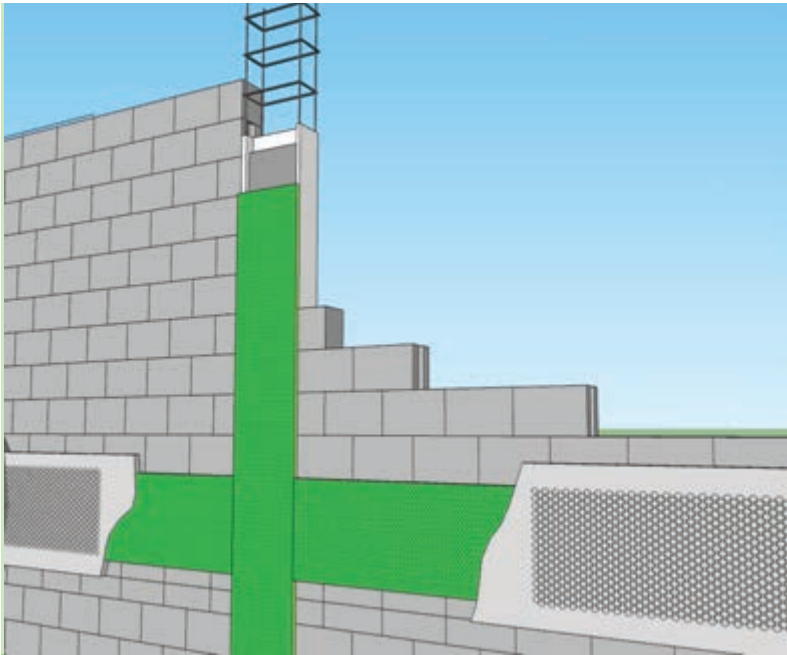
- grip firmly - non slippery
- moisture resistant
- lightweight
- easy to install

Double wall insulation

Eco Foam can be adapted to the buildings with double wall/ knee wall. Eco foam can be installed in the middle of the wall between two sides, which is quick and easy to install. It prevents the heat transfer in and out property as well as moisture condensation.



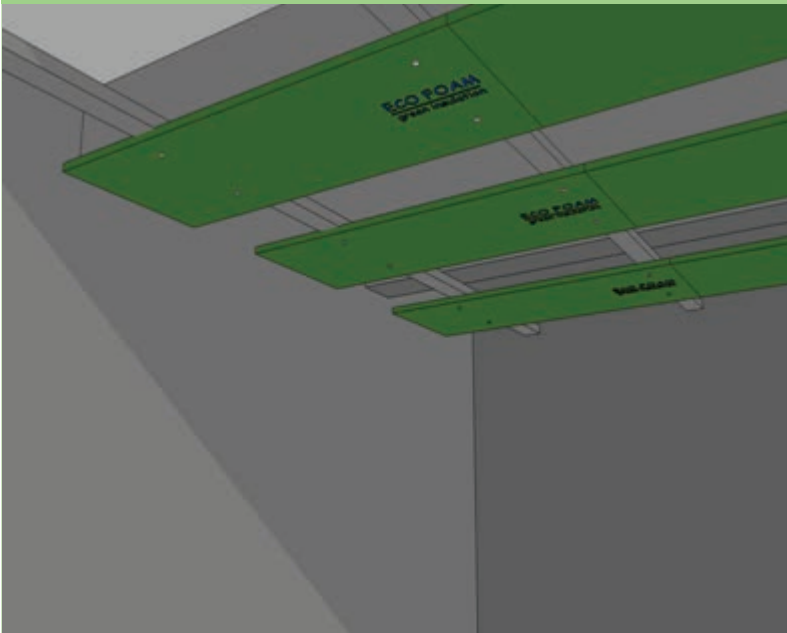
- strong
- prevent leakage
- heat insulator



Reduce energy loss.
Maintain the temperature within building.
Prevent leakage of water and moisture condensation

Insulation structure

Install Eco Foam to column or beams and cover with concrete. Insulation will prevent against heat that comes through concrete wall and prevent moisture condensation.



- easy to install
- easy to clean
- light weight

Ceiling insulation

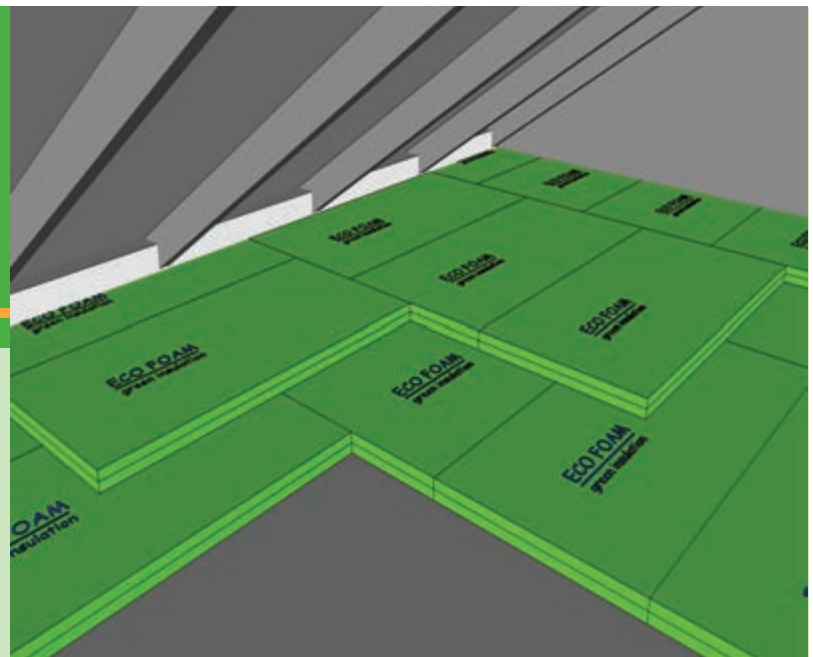
Install Eco Foam under roof or building structure as insulation.
Eco Foam is easy, convenient and fast to install and lightweight and you can forget about plasterboard.

Attic insulation

Due to the global warming situation that affects the daily life of people.

Houses those affected by this situation should apply Eco Foam to the attic of the house.

Our insulation panel is the right device to protect your family from the heat and it is suitable with old or newly built house with quick and easy installation.

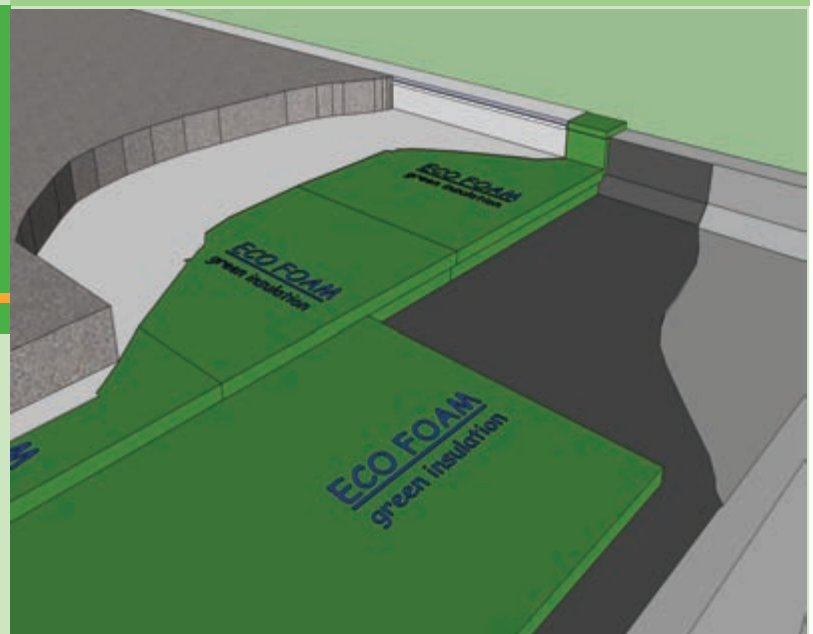


- Easy to install
- long lasting performance
- remain cool temperature
- moisture protection/resistant

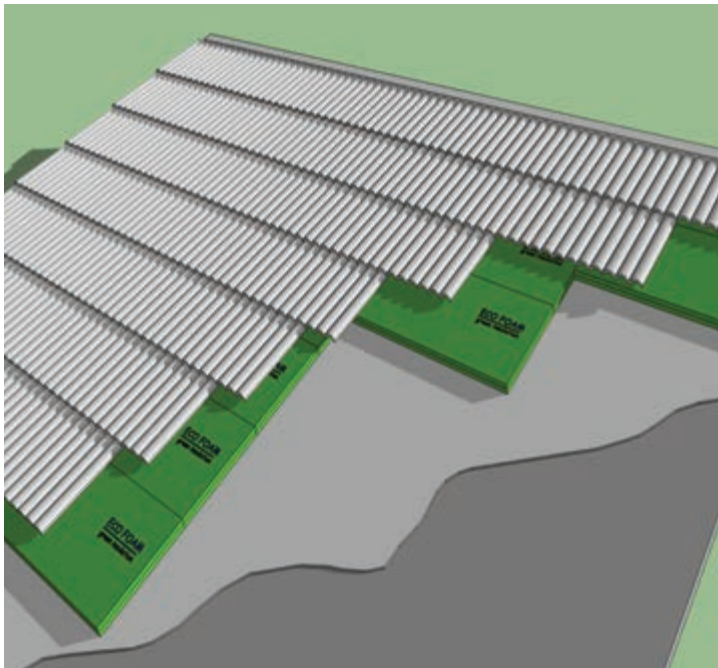
Flat roof insulation

Eco Foam is an excellent choice for insulation, protecting the building from weather conditions: heat, moisture or cold temperature to get inside the building.

Eco Foam can be installed to the flat roof and cover with waterproof membrane, protected with additional surface such as cement board, waterproof plywood or even soil to grow plants. Eco Foam prevents moisture condensation, you can be sure that your house will not be damaged by moisture.



- long lasting in different environment
- moisture proof
- lightweight
- resistant for heavy loads



Roof insulation (gable roof)

Suitable for old and modern building
lightweight
thermal conductivity

Fix Eco Foam between rafters and install roof tiles to protect against heat from sunlight and leakage of the rain.

TECHNICAL DATA ECO FOAM						
Proerty Unit	Code According To DIN EN 13164	CSL 1150	CSL 1250	CSL 2160	CSL 2260	Standard
Surface		skin	skin	skin	skin	
Length x width (mm.)		1000 x 500	2000 x 500	1000 x 600	2000 x 600	
Density (kg/m3)		36	36	36	36	DIN EN 1602
Thermal conductivity [w/(m.k)						DIN EN
Thermal resistance (m2 k/w)						13164
30 mm.	-	0.032 0.95	0.032 0.95	0.032 0.95	0.032 0.95	
40 mm.	-	0.034 1.25	0.034 1.25	0.034 1.25	0.034 1.25	
50 mm.	-	0.034 1.50	0.034 1.50	0.034 1.50	0.034 1.50	
Thickness 60 mm.	-	0.034 1.80	0.034 1.80	0.034 1.80	0.034 1.80	
80 mm.	-	-	0.036 2.30	0.036 2.30	0.036 2.30	
100 mm.	-	-	0.038 2.80	0.038 2.80	0.038 2.80	
120 mm.	-	-	0.038 3.20	0.038 3.20	0.038 3.20	
140 mm.	-	-		0.038 3.65		
Compressive stress Or compressive strength kpa At 10% deformation	(10w)	150-200	200-300	300	500	DIN EN 826
Compressive creep Over 50 years kpa At < 2% deformation	cc(2/11.5/50)	60-80	200-300	130	180	DIN EN 1606

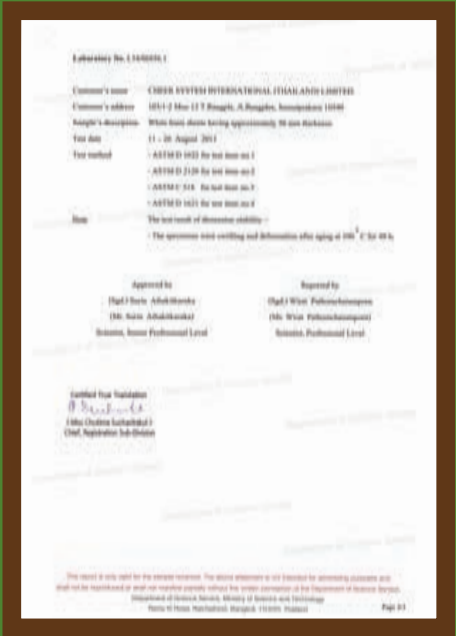
CHEER SYSTEM
INTERNATIONAL (THAILAND) LIMITED.

TECHNICAL SPECIFICATION

ECO Foam Spacification ข้อมูลจำเพาะแผ่นโฟม XPS Manufacturing Standard

Generic type ข้อมูลทั่วไป	Thicknees ความหนา	Overall Weight Per Unit Area น้ำหนักรวม / แผ่น	Termal conductivty (K) อัตราการถ่ายเท ความร้อนจำเพาะ	Termal Resistance (R-Value) ค่าความต้าน ทานความร้อน	Density ความหนาแน่น	Resistance Pressure การต้านทานแรงดัน	Compression strength การทนต่อ แรงบีบอัด	The board poses no health or safety risks ข้อกำหนดด้านสุขภาพ และความปลอดภัย	Flame Retardant การลามไฟ
Polystyrene Foam โฟม โพลีสไตรีน	20 mm. 20 มม.	1.36 kg/m ² 1.36ก.ก/ตร.ม.	0.024 W/(m.k)	2	40-45 kg/m ²	250 kpa	240 kpa	CFC & HCFC & Asbaston free ไม่มีสาร CFC & HCFC และ ไยหิน	No Flame Retardant ไม่มีการลามไฟ

PRODUCT TESTING DATA



Insulation Saves Money

“Do you know that 44% of your bill is spent with air-conditioners? You can save 30% of the bill today just installing the insulation panel. After installing insulation in your house, you will even save more.

Eco foam will protect your house from heat outside the building and moisture from rain. You will not be wasting money with additional maintenance. All mentioned above, can clearly explain you advantages of having insulation.



Environment



“Protect the environment today with insulation panel.”

Eco Foam helps reducing global warming with its qualification of low thermal conductivity. Houses and building that install Eco Foam as heat insulation use less energy and save money.

Every manufacturing procedure of Eco Foam contains non greenhouse gas such as CFC, HCFC and HFC. You can be sure that our Eco Foam product is environmental friendly, without toxic components. Your life quality will not be affected from using Eco Foam. Moreover, Eco Foam is 100% recyclable.

Manufacturing Process

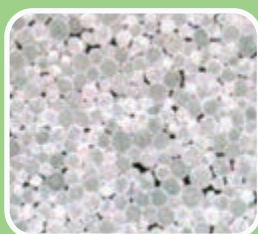
The outstanding quality of Eco Foam comes from different production procedures. Eco Foam produced in extrusion process which is different from the production of ESP Foam.

Eco Foam process starts with releasing solid Polystyrene to the extruder mixed with some additives (our secret component) to qualify

After that our modern technology will mix blowing agent to Eco Foam substance, resulting as closed-cell structures make it the high quality foam. Picture showing cell structure.



ECO FOAM



EPS FOAM

Cheer System International (Thailand) Limited

บริษัท เชียร์ ซีสเต็ม อินเตอร์เนชั่นแนล [ไทยแลนด์] จำกัด

103/1-2 Moo 12, Bangpla, Bangplee,
Samutprakarn 10540 Thailand.

Tel. : + 66 02 174 6182 ~ 6 Fax. : + 66 02 174 6187

www.cheersystem.com E-mail : cheer@cheersystem.com