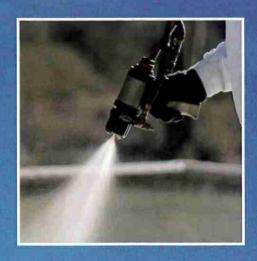




# Ddu-chem

Polyurethane System Suppliers For The Contracting Industry





# **Open Cell Sprayfoam**

- Provides a Seamless Air Barrier
- 100% Water Blown No Noxious or Harmful Gases
- Minimises Thermal Bridging
- Seals Gaps and Cracks and Prevents Cold Air Infiltration
- Excellent Sound Proofing Giving a Quieter Home
- Completely Fills Irregular or Hard-to-Reach Spaces
- · No Settling or Sagging over time

# G-1945 Closed Cell Spray Foam Insulation in Domestic Properties

G-1945 is a closed-cell, spray applied polyurethane foam used extensively in domestic properties both new and old. The foam system has a Class 1 Fire Rating, tested to B.S. 476 part 7, and also achieves excellent insulation values with the minimum of thickness compared to other forms of insulation. When used in domestic un-ventilated roofs, G-1945 minimises the risk of condensation build-up in accordance with B.S 5250

As G-1945 is spray applied in-situ, the foam is an ideal way of achieving excellent thermal insulation, whilst also providing extremely effective controls against unwanted air leakage and preventing condensation. Being spray applied, foam insulation will seek and seal any gaps in the structure and mould itself to all contours, preventing unwanted air infiltration and heat loss.

When applied directly to domestic roofs, G-1945 closed-cell foam insulation is also used to bond slates and tiles together providing increased structural support and stabilisation.



#### **Domestic Roof Insulation with G-1945**

- Meets and exceeds Building Regulations with regard to thermal insulation, whether for new build, extensions or conversions.
- Meets Building Regulations in respect of the Control of Condensation, conforming to all relevant calculation methods
- Reduces heat loss in winter and minimises heat gain in summer
- Provides a seamless layer of insulation, enhancing airtightness.
- Superior space savings compared to traditional forms of insulation



#### Domestic Roof Stabilisation with G-1945

- Applied to the underside of existing roofs to bond slates and tiles together and to structural or supporting timbers, replacing the need for fixing nails.
- Much less costly alternative than re-roofing; foam can be also be applied to numerous different roof coverings.
- Permanently cures problems of nail fatigue, whilst making the roof much more resistant to storm or impact damage.
- Bonds directly to the roof surface, greatly reducing unwanted air-leakage and preventing ingress of wind-driven rain, snow and dust.

#### G-1945 Sprayed Roof Insulation

 $\begin{array}{lll} Average \ Depth & 105mm \\ U-Value & 0.16W/m^2K \\ Condensation \ Risk & Zero \end{array}$ 

Ventilation Un-ventilated loft
Additional Insulation 100mm mineral fibre
at ceiling level

- Extremely durable insulation with little or no loss of properties over time
- Unique installation method guaranteeing even complex areas are insulated to the highest standards, quickly and easily.

# G-1945 Closed Cell Spray Foam Insulation in Non-Domestic Properties

G-1945 closed-cell polyurethane spray foam insulation is the perfect insulation solution for virtually any insulation project, no matter how complex the area to be insulated is. Closed-cell spayed insulation not only provides excellent thermal insulation, it also adheres directly to virtually any surface allowing the contractor to deliver superior insulation with the minimum of down-time.

Closed-cell foam can be applied to virtually any surface, when installed the foam will give a Class 1 Fire Rating when tested to BS 476 Part 7

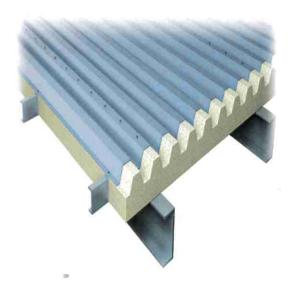
G-1945 closed cell foam is used extensively to solve and eliminate condensation problems on metal and other surfaces, by adhering directly to the surface G-1945 eliminates cold bridges and prevents both surface and interstitial condensation.



## Closed-cell foam can insulate many surfaces, including:

- Metal
- Asbestos
- Fibre cement
- Concrete
- Brick
- Plastic
- Stone
- Slate/Tile

When used on ageing roofs of any type, G-1945 can help to significantly increase the lifespan of the roofing material and help protect against future damage. As spray foam is installed directly to the underside of the roof the insulation forms a continuous structure, helping to spread and minimise any load or stress placed on the roof making breakages from impact damage far less likely.



## **Key Benefits of G-1945 Closed-Cell Foam Insulation**

- Easily applied to complex areas and profiles
- Minimal preparation work required
- Reduces energy usage and heating/cooling costs
- Adheres directly to virtually any surface
- Eliminates condensation permanently
- Fast installation times
- Enables more efficient control of temperatures
- Seamless layer of insulation, reducing airleakage and cold bridging
- Minimum disruption to workplace
- Can help bring old buildings up to modern standards quickly and easily
- Resistant to vermin
- Can seal gaps at eaves and junctions to prevent entry to wind, rain, dust, vermin, birds, etc

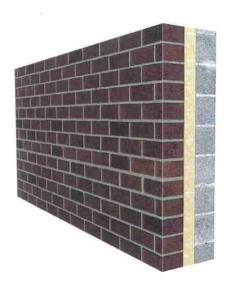


# **Slow Pour Cavity Foam Insulation Systems**

Edu-Chem Ltd can supply both open and closed-cell, slow pour cavity insulation systems, tailored to the needs of specific projects. Both foam systems are used to insulate and stabilise cavity walls, where they replace the need for wall ties in older cavities. Both open and closed cell cavity systems deliver an excellent air-barrier, minimising unwanted air-leakage.

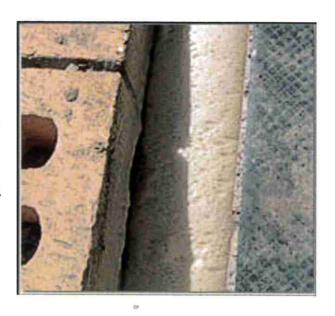
Open-cell slow pour polyurethane foam is a low density foam system, specially formulated for the injection of cavities where air-tightness is a priority.

Closed-cell slow pour polyurethane foam has a higher density of  $40 \text{kg/m}^3$ , with a thermal conductivity of 0.02 W/m.K closed-cell foam systems are ideal where air-tightness and a high degree of thermal insulation are required.



## Closed-Cell Slow Pour Polyurethane System

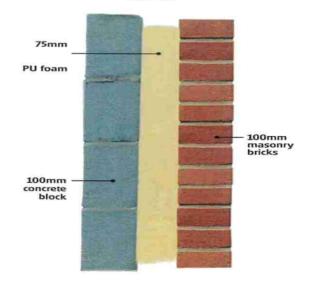
- Used to insulate and stabilise cavity walls suffering from wall tie failure
- Excellent thermal insulation figures, allowing maximum insulation to be achieved in even narrow width cavities
- Doesn't sag or settle over time, unlike other conventional forms of insulation
- Delivers excellent air-barrier, minimising unwanted air-leakage
- Moulds to fabric of the building, sealing and reducing air-leakage
- Excellent bond strength, restores integrity of cavity walls
- Resistant to flooding
- Reduces airborne noise passage

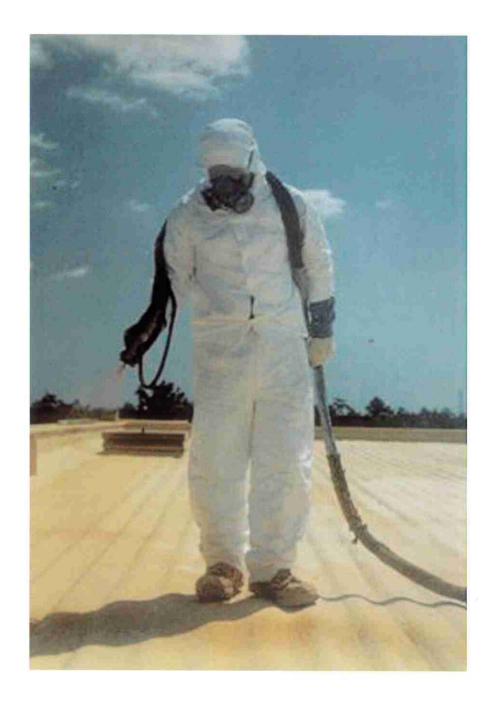


#### **Open-Cell Slow Pour Polyurethane System**

- Reduces airborne noise passage
- Doesn't sag or settle over time, unlike other conventional forms of insulation
- Expands to form an air-tight seal around doors, windows and other openings
- 100% water blown, no CFC's or VOC's
- Delivers excellent air-barrier, minimising unwanted air-leakage
- Provides continuous structural connection between cavity leaves.
- Covered by British Standard Code of Practice BS 7456

### Masonry Cavity Wall U-value 0.27 W/m<sup>2</sup>K





## **External Applications of Sprayfoam**

- Applied Directly to External Surface of Roofs to Reduce Heat Loss
- Used on Commercial, Industrial and Institutional Buildings
- Allows Large Areas to be Insulated Quickly and Easily
- Can Achieve any U-Value Specified by Varying the Depth of Foam
- Can be Applied to Almost All Roofing Surfaces
- Adheres Directly to Roof Surface Forming a Continuous Layer of Insulation
- Applied to Either New or Old Buildings
- Covered by Membrane to Ensure Protection from U.V. Light and Water Ingress
- British Standard B.S. 7021 has been written to cover the installation of external sprayfoam

## **Alternative Uses of Polyurethane Foam Insulation**

Polyurethane foam insulation has many uses in a wide variety of industries, whether that is closed-cell, open-cell, spray or pour systems.

Edu-Chem Ltd are experts in the specification and supply of a wide range of polyurethane foams, allowing us to provide foams to contractors to suit virtually any application, including:



**Marine Applications** 



Narrowboats



**Portacabins** 



**Shipping Containers** 



**Leisure Applications** 



**Filmsets** 

These are just a few of the many uses of polyurethane, other than building insulation. For more information, or for advice on specifying polyurethane for your installation, please give us a call.



NORTHSTAGE 92 BROADWAY

SALFORD M50 2UW

TEL: 0161 876 8040 E-MAIL: info@edu-chem.co.uk www.edu-chem.co.uk

