

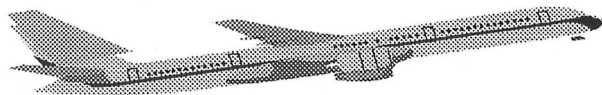
Editorial

Integrated Polymer Systems UK Ltd launched Rubberfuse in the United Kingdom in November 1997. The product line was introduced to a limited group of professionals during a session organised at the conference room of the Heathrow Airport Control Tower. At that time, Rubberfuse was a total newcomer on the UK market and only a bunch of enthusiastic pioneers were prompt to see the advantages offered by Flexible Polypropylene Alloy-based systems and join IPS. After less than three years of operations and over 300.000m² successfully installed projects, Rubberfuse has earned a reputation as high performance environmentally friendly systems in the demanding British market.

The IPS approach to educating companies to the possibility of "greener" waterproofing through CPD (Continuous Professional Development) continues to pay dividends within the UK roofing market. Also the meticulous training of installers and representatives has shown prospective specifiers that they do not have to sacrifice performance when specifying a Rubberfuse system.

We would like to take the opportunity of the coming third year anniversary of cooperation with IPS to talk at length over UK in this issue and also express our thanks to Peter Bowers, Managing Director, and to all at IPS for their continuous commitment. We are confident that their uncompromised quality-oriented attitude will lead to the IPS/Rubberfuse team becoming fairly soon a leader in their field.

rubberfuse Sintofoil Single Ply Roofing System Takes Off at Heathrow - Invitation



Invitation to the UK launch - 11. 1997

New : Rubberfuse standing seam profile

Modern roofing systems require more than just quality. Another very important stipulation is also appearance. In order to meet such requirement, the Rubberfuse line of accessories now includes the standing seam profile. This profile is made of compatible polypropylene to allow hot

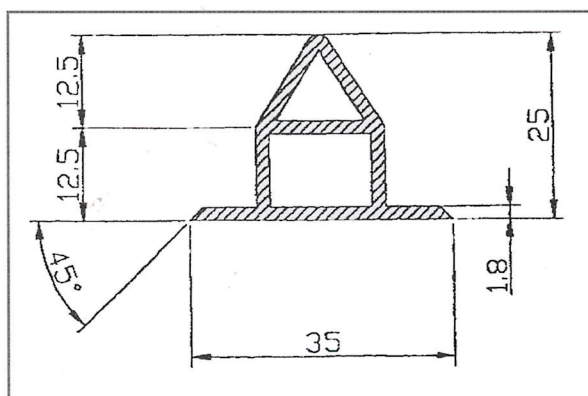
air welding onto the membrane. Its standard colour exactly matches the Sintofoil membrane's lead grey colour. The new Holiday Inn in Lichfield, Staffordshire, is a perfect example of modern roofing. The architect for the international Holiday Inn organisation had a requirement for a high performance membrane that was capable of waterproofing the horizontal areas of this prestigious new building. The product needed to be quick to install, have a comprehensive warranty and all the independent testing, assurances and certifications expected in today's specifier environment. The product chosen to fulfil their needs was the Rubberfuse mechanically attached system.

Holiday Inn invest heavily in the look of their buildings and as rooms in the hotel looked out onto the flat roof areas, it was important they were attractive as well as practical. This was achieved by using lead grey ST Sintofoil membrane, mechanically attached to the roof with profiled sheet laminated metal flashings completing the perimeter. For the high-level roof areas, a Rubberfuse decorative standing seam trim profile was used to give the appearance of lead without the cost and inconvenience.

Mineral Star, the Rubberfuse approved applicator selected to install the project, were heavily involved with other single-ply systems until they were introduced to the Rubberfuse systems. They were especially impressed by the ease with which the Sintofoil membrane was heat welded and detailed. They have now converted many of their current projects over to Rubberfuse.



Holiday Inn in Lichfield - mechanically attached system + profile



Standing seam profile / cross section

TESCO goes Rubberfuse

The huge Tesco Corporation takes the waterproofing of their stores very seriously. They have traditionally used PVC waterproofing but are increasingly adopting an environmental attitude to not only their product lines but their buildings as well. When constructing their largest store to date, some 15.000m², Tesco specified the use of Sintofoil ST membrane mechanically attached on polyurethane insulation and vapoursealed profiled steeldeck. The roofing contract was awarded to Pitchmastic, a well-established player in the market.



Tesco in Bar Hill - 15.000 m² mechanically attached system

Tesco specified the Rubberfuse system for its environment friendly properties, which in no way compromise its waterproofing ability. This is indicative of today's approach to waterproofing. The many factors influencing the choice of modern materials are wide and comprehensive. Materials must look good, perform exceptionally and also fall within current environmental thinking. Rubberfuse fulfils all these requirements. The conversion of Tesco was quite a coup for IPS (UK) Ltd as, until now, the PVC waterproofing specification on Tesco stores has been almost impossible to break.

Due to the success of the Rubberfuse system, further stores are now being specified throughout UK to use this environmental material. Pitchmastic were initially wary of switching to a new single-ply system. After ongoing comprehensive training and site support, they are very happy with the application of the system, especially the ability to automatically heat weld the seams. The increased working window, i.e. the material can be welded in damp conditions, means improved productivity on site and much less down time.

Several degrees above the rest

Integrated Polymer Systems (UK) Ltd seems to be developing a niche for roofing Universities. IPS and Rubberfuse proved to be the choice of Universities in Leeds, Birmingham, Sheffield and London when the time came to refurbish their roofs.

The "green issue" once again played a significant part in Rubberfuse being the preferred option as the roofing material. With its environmentally friendly properties and aesthetically pleasing appearance, IPS had no difficulty in convincing planners that Rubberfuse was the most appropriate material for the present time and the future.



Nottingham University - 6.000 m² adhered system

Dutch approval secured

Obtaining approval from local authorities in each country where the Rubberfuse Division is active is part of Imper Italia's marketing strategy. As soon as Altena Dak- en Gevelmaterialen N.V. became the Rubberfuse distributor for the Netherlands, the procedure aimed at obtaining the CTG Agrément certificate was initiated. Today, one year later, it is completed.



The testing program, carried out by BDA-Intron, included two parts : evaluation of properties of the Sintofoil membranes in accordance with BRL 1511 part 1 and part 8 and fire testing in accordance with NEN 6063. The fire test was carried out on Sintofoil FR/B2 type, mechanically attached on 120g/m² glass fleece, 100mm thick EPS insulation board and 0.75mm gauge steeldeck. More details on the reports are available upon request.

This certification is a major addition to Altena's marketing tools, as local acceptance is a key to development. Today, over 70.000m² Rubberfuse roofs have been installed in Holland. Many more will certainly follow!

We would like to take this opportunity to express our thanks to Altena's staff. Their support during the process is highly appreciated.

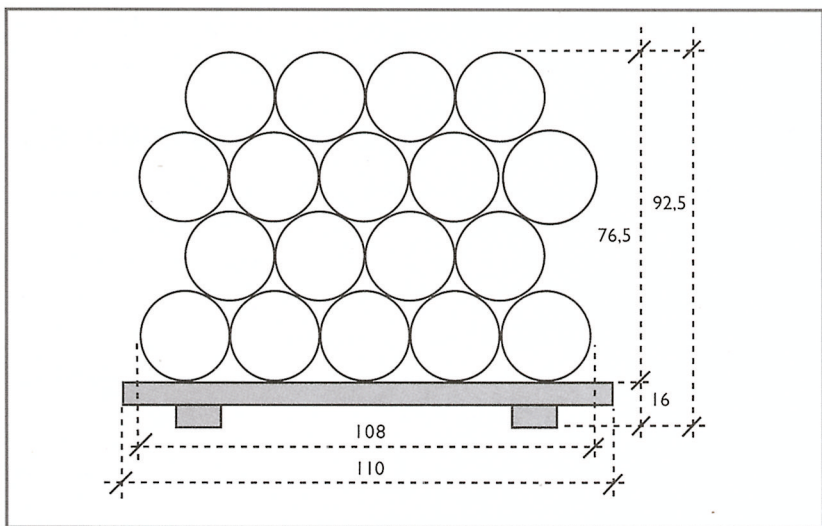
Standard packaging

In today's competitive world, continuous efforts are requested to lower all costs. In order to reduce the impact of transportation, the standard packaging of Sintofoil membranes has been adapted to allow for optimal truck loading.

Effective as of next month, all types of Sintofoil membranes will be packaged on stackable pallets, 18 ea. rolls per pallet. A typical full truckload of 1.2mm thick Sintofoil membranes will consequently include 22.680m² e.g.

- 24 pallets of 18 rolls 2.10mx25m or 36 rolls 1.05mx25m (945m²/pallet)
- 28 pallets of 18 rolls 1.50mx30m or 36 rolls 0.75mx30m (810m²/pallet)

For 2.10mx25m and 1.05x25m rolls, this results in a significant saving, as only 14.490m² could be loaded with the current packaging (23 rolls on non-stackable pallet).



Last minute

After Holiday Inn (see article overleas), another "big name" is now part of our list of customers. The Rubberfuse mechanically attached system has been selected by Ford Otosan to cover a new extension at their facilities in Istanbul, Turkey. Congratulations to Metusan Grubu Ltd, the local Rubberfuse distributor, for this achievement!



Publisher information

Rubberfuse News is published by Imper Italia - Rubberfuse Division International Operations
mast sa • 7 Rue du Bois
 1480 Tubize - Belgium
 Tel 00 32 2 355 62 79
 Fax 00 32 2 390 05 70
 E-mail mast_sa@win.be

Rubberfuse Systems get I-90 and Class A FM Ratings

As part of the trend for improved quality in the construction industry, an increasing number of specifications for industrial and commercial buildings call for Factory Mutual certification. Rubberfuse therefore initiated a program aimed at obtaining FM certification for the mechanically attached roofing system, using ST and RC Sintofoil membranes. Two types of FM approved insulation boards were selected : Rockwool's Taurox C and Kingspan's TR 27 Thermarroof. All systems were tested on FM approved 22 ga grade A/C steeldeck. Sintofoil membranes were of the fire rated type.



Sintofoil ST - 9' x 5' test

Wind uplift test

Sintofoil ST mechanically secured with nylon " locking " plates and D14 fasteners at 12in (305mm) on center in rows 48in (1.22m) apart to Rockwool failed at 135 psf (equivalent to 6.412Pa). The test was carried out on the 9ft x 5ft (2.74m x 1.52m) table.

Sintofoil RC mechanically secured with nylon " locking " plates and D14 fasteners at 6in (152mm) on center in rows 64in (1,63m) apart to TR 27 Thermarroof and PE vapour barrier failed at 165 psf (equivalent to 7.838 Pa). The test was carried out on the 24ft x 12ft (7.32m x 3.66m) table. The wind classification for both systems is I-90.



Sintofoil RC - 24' x 12' test

Fire test (ASTM E 108)

Sintofoil ST on Rockwool board had a maximum flame spread of 22in (559mm) for sample 1 and 26in (660mm) for sample 2. Sintofoil RC on Kingspan board had a maximum flame spread of 31in (787mm) for sample 1 and 34in (864mm) for sample 2. All samples passed with Class A rating at 2% slope.

It is interesting to note that based on these results, the use of each insulation will be approved for use with both ST and RC Sintofoil roof covers.

In addition to the performances described above, Sintofoil FPA membranes offer weatherability and dimensional stability superior to most other synthetic membranes.



E 108 fire test

QC Corner

When touching for the first time a sample of Sintofoil membrane, a usual comment of many prospects is: "that material looks quite rigid, it must be difficult to properly execute details with it". Later on however, during the training course or on the field, the initial attitude changes, as Sintofoil's rigidity actually turns out as positive features:

- once unrolled, the sheets remain perfectly straight, allowing for easy and effective welding.
- at skirting, the membrane can be neatly installed at the angle change, as it is possible to press the fold with a roller prior to executing the vertical/horizontal connection (see pictures).
- for corners and pipes, Sintofoil becomes soft by heating it at the appropriate temperature, which then allows for forming the detail as required.



Executing a skirting at the Training Centre



...and the result on the field

Certification program

Sintofoil membrane and Rubberfuse systems have been tested to show compliance with UEAtc Directives and requirements of other European countries. Approval and/or Testing Certification has been obtained from the following Authorities :

British Board of Agrément	United Kingdom	97/3422
Veritas	France	IEX00980019F-IEX00980018V
Epitesügyi Minőségellenőrző Innovacios	Hungary	A-1069/97
Technischen Universität München	Germany	2509a-98 and 2523a-98
Centrum Stavebního Inženýrství	Czech Republic	STO-98-0040/P
Izolacja COBR	Poland	AT/99-12-0130
BDA Intron	Holland	CTG 368

Other programs are currently underway :

Centre Scientifique du Bâtiment	France
Union Belge pour l'Agrément Technique	Belgium
ICITE	Italy