

Investing in quality the motto at Seal Systems

Seal Systems Ireland embraces the basic philosophy of putting the best quality solutions for all their waterproofing solutions at the core of its business, and it will not move from this position, says Managing Director **Ray Brennan**.

This simple and logical reasoning is the basis of the company's survival and indeed strength, during this difficult period for the construction industry. "It is staggering how much shoddy workmanship remains throughout the country caused by un-accountable companies that have escaped the responsibility of putting right the defective workmanship that was common practise during the Celtic Tiger years in particular," he says.

"All of these now largely dissolved companies had given wonderfully satisfying guarantees that are now worthless. Also, the insurance backed warranties are riddled with loop holes and also generally worthless," he continues.

"Seal Systems Ireland firmly believes and understands the highest quality products, with all of the required certifications, backed by proper technical service and endorsed by an established company with a track record, far outweighs the short term comfort of spurious guarantees filed away as primarily an ass covering exercise," he adds, in a provocative statement against the worst excesses of the past 20 years.

"It is unfortunate that many long-established firms have been destroyed and pulled down as a result of their association with enterprises built upon shaky foundations and run by un-accountable individuals.

"It is interesting to note a new development that is at last emerging and driven rightly by duty bound responsible specifiers. The approach that is picking up momentum is in direct opposition to the usual practise where, for instance, an architect or engineer researches the best solution for waterproofing a project; it is then specified but in turn the building contractor, in possible conjunction with the sub contractor puts forward a cheaper or lesser quality option.

"The devastating and very costly result of this short term gain for the building



Seal Systems MD Ray Brennan

contractor/sub contractor is endemic throughout the country. The approach growing in these cases is were the specifier, in return for being overruled by the builder goes directly to the client demanding to be indemnified against responsibility for a product they did not approve.

"This brings a reality check to the fore in terms of ensuring that the alternative product is at least equal in performance or reverting to a product approved by the specifier. Until recently it was the client who lost out in the long term, however this position is gladly changing in the interest of all parties. We know and believe fully that the intelligent approach to real value is in examining all aspects of the waterproofing option from cradle to grave, and to be fully convinced that the life expectancy, as documented, is

realistically ensured by professional applicators.

"A good example of where Seal Systems Ireland has excelled in consideration of these points, is we are the first company in Europe to achieve Agrément certification for a polyurea seamless spray on membrane BASF Polyurethanes, Elastocoat c 6335/101. The life expectancy is double that of its nearest rivals and its performance when studied is unrivalled in the domain of agreement certified products globally. The fact there is stringent independent analysis of this product by the Irish Agrément Board, coupled with their periodic policing of application is a critical and vital extra reassurance for the specifier and client.

"Seal Systems Ireland is also for many years involved in the most prestigious projects

countrywide with multiple types of sealants, adhesives and firestop systems for the construction industry. The awareness of failures that have caused huge damage by products that reflect a tiny fraction of the overall cost of the building structure, has given Seal Systems Ireland lots of work for the future in advising and supplying proper sustainable solutions.

“Seal Systems has consulted on major issues concerning projects that resulted in large savings due to their in-depth knowledge and common sense approach in finding sustainable waterproofing solutions.

“Multiple examples of successful product applications can be discussed with us including: Intel, Tallaght Hospital, Port Tunnel Dublin, The Great Palm House Botanic Gardens, Coca Cola, Dublin Docklands, Pfizers, Analog Devices, New Mater Hospital, Dublin and Cork Airport, Pfizers Cork, DCU, LUC, CUC, UCD, Croke Park, ESB, Eircom, and many more.

It is usually the case when Seal Systems fails in securing specification on a project that a lesser performing option is nearly always used instead. It appears the real overall value in consideration of performance over a minimum of 25 years is not taken into account, hence the client ultimately loses out. It seems that consumerism overshadows long term integrity, even though the marketing model spuriously depicts a false sense of security for specifiers. It also appears that long term accountability has been absent, particularly over the past 15 years in the construction industry, the results of which are to be seen everywhere at great cost.

“Airtightness is a good example of Seal Systems Ireland leading the way for facades of buildings and also in the domestic domain. The challenge of combining maximum light with maximum energy efficient insulation materials continues, with constant improvement of systems where, for instance, window and wall meets. Seal Systems has certified options of a futuristic nature for filling these joints to the required

building standards, combining flexible insulation foams with high performance sealants. The problem of the past is that the expanding foams that are common for fixing and insulating window frames tend to crack due to differential movements of material, like aluminium versus concrete, meaning the insulation barrier is breached.

“Environmentally friendly solutions are at the forefront of Seal Systems business philosophy. For instance, many of the injection resins that are used for remedial and new build below ground structures are toxic and should never reach the water table, which is very difficult to avoid when pumping these resins into basement structures in an effort to stop water penetration. Examples of catastrophies due to these problems are well documented but largely unknown in Ireland as yet.

“Stone facades of buildings have been globally defaced by a lack of knowledge or sometimes product being used without an unblemished track record. Many sealants have the capacity to leach plasticisers into natural stone and marble. Examples can be seen also throughout Ireland with Seal Systems Ireland the leaders by far in supplying

product that does not create this ugly staining effect.

“The risks of using untried sealants in this domain of application are very high and far outweigh any possible small financial gain. In the overall equation of cost it has been in the region of 0.06 cents per meter of sealant in an 8mm joint. Work this out as a percentage of the overall cost of the stone façade and it just does not make any sense at all.

“In general, product knowledge, independent certifications, and track record of high quality products guaranteed to perform cannot be substituted in the interest of long term performance and realistic value.

“Seal Systems Ireland welcomes any discussion in relation to explanations regarding our well-founded revelations contained in this article,” concludes Ray.

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26-mile China bridge using polyurea

A new 26 mile-long bridge in the Shangdong province of China is protected with polyurea. The bridge is exposed to temperatures of minus 50 fh and plus 100fh.

Situated in North China and subject to critical temperature range, where there are 50-60 days of frozen thawed time per year, the bridge required a versatile coating with fast cure against high humidity, high thick film building, high tensile strength, high elongation at break, high impact resistance, high abrasion resistance and uv stability with a 100 years durability. “They chose polyurea,” says Ray. “It’s the ultimate way forward in protective spray applied waterproofing membranes.”

The bridge was designed to be strong enough to withstand a magnitude eight degree earthquake, typhoons, or the impact of a 300,000-ton vessel.

According to experts, “construction of the bridge is a technological miracle”.

The design lifetime is 100 years, which requires high performance protective coatings. After a long period of survey and investigation, pure polyurea was chosen because it contains:

- High thick film building, high tensile strength.
- A versatile coating with fast cure against high humidity.
- High elongation at break.
- High impact resistance.
- High abrasion resistance.
- UV stable with 100 years’ durability.