

THE HEAT IS ON!

The amount of energy used on swimming pools is significant and the Government's policy of reducing carbon levels made it inevitable that the industry would, at some stage, become a target for more regulation. Part L of the Building Regulations took effect on 6 October and has thrown pool insulation systems into the spotlight

By Alan Lewis

Pool builders and pool owners have been reassured that the new Part L of the Government's Building Regulations now in effect will not mean higher costs to pool builders or pool owners.

The key to the new regulations is that swimming pools have been brought into line with the same insulation requirements of that which apply to domestic and commercial properties.

The new regulation states that: "Where a swimming pool is being provided in a building, the U-value of the basin (walls and floor) should not be worse than 0.25W/m²/K."

From 6 October when the regulations took effect, pool builders will now have to produce

calculations to the local authority together with drawings showing how the construction method proposed to build the pool will comply with the new Part L regulation.

The cost of insulating correctly can be recouped as quickly as the first year. With the assistance of Government energy grants or interest free loans it can be completely free in some instances.

Swimming pools are constructed in varying soil conditions and in some instances out of the ground. The heat loss through the shell of the pool is therefore dependant upon the ground conditions that surround the pool.

Pool insulation company Thermapool is the

only Government accredited swimming pool insulation system and at the forefront of the opportunities linked to Part L.

Said Thermapool Director Nigel Rose: "We achieved this after 18 months of independent testing by Ofgem and BRE. Ofgem ascribed Thermapool the maximum 40 year lifetime for both tiled and liner swimming pools.

"Thermapool Grants are funded by the same funds loft and cavity wall insulation grants come from. Grants for domestic swimming pools vary from between £700 and £3,500 and are available regardless of financial status.

"All pool owner's and pool builders can claim these Government energy efficiency grants to

SURREY SCHOOL POOL SAVES £4,700 IN FIVE MONTH SEASON

Pupils at a Surrey junior school now enjoy more swimming time than ever before since Thermapool swimming pool insulation enabled the school to cut its energy costs.

Since renovating and insulating the school swimming pool, the cost of heating has dramatically reduced from what used to cost £5,000 in a single swimming season (Easter till the summer break up) to £700 in 2009 and £300 in 2010. Apart from the cost saving, benefits include a sharp reduction in carbon emissions.

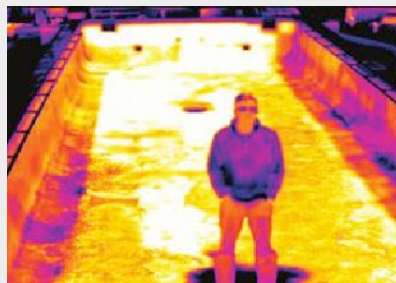
A school spokesman said: "We found Thermapool retained heat in our pool so effectively we completely turned off our pool heating for two weeks in summer 2009. Far from worrying about heating the pool, we were able to do without any heating at all since the temperature was reaching up to 34°C. So our heating bill fell from £5,000 to just £700. With this knowledge of how effective Thermapool is, in 2010 we decided to do without pool heating for two months of the swimming season. We just made the most of the fact

that Thermapool makes the pool base act like a solar panel and let the sun heat the water free! At one point the water reached 36 degrees which prompted us to want to cool it down! To do this, occasionally we left the swimming pool cover off overnight. As a result, we saved £4,700 on our swimming pool heating bill in the five month 2010 swimming season. Our cost was just £300!"

The swimming pool now is timed to heat

for a maximum of five hours a night on economy 7 heating. Previously the swimming pool required being heated 24 hours a day.

Nigel Rose, Director of Thermapool said: "Due to the nature of the Thermapool system which cuts heat loss by approximately 86% it traps natural heat such as that from the sun, turning the base of your swimming pool into a solar panel."



Picture taken with an ordinary camera and then with a thermal imaging camera showing the heat retention on the base of the pool and how the insulation, applied as part of the renovation of the pool, is retaining the sun's energy, turning the pool into a huge solar panel and heating the pool water free!

insulate any domestic swimming pool, new build liner and tiled pools, renovating liner and tiled pools. Even liner changes can claim these grants."

Nigel Rose also dealt with other questions:

There's now rumours that there will be another update to the regulations – why and what is the scope of them?

"Changes have been discussed and it's true that it has been written too loosely, which may allow people to get out of correctly insulating to the standard that the legislation seeks to achieve, i.e. extra insulation in the walls but not in the floor of the swimming pool, thus not achieving true insulation benefits or energy savings."

What are the day to day differences for pool builders?

"Pool builders need to be trained correctly in using Thermapool which is the only way they can hope to achieve the Government grants or energy saving loans available. Pool traders will benefit from customer satisfaction. Customers experience disappointment with pools that are not insulated because they find they are just too expensive to heat to a temperature to permit year-round swimming. When customers discover that heating a swimming pool can be affordable, they will be more keen to buy. Customers will become more aware of energy saving issues and in the very near future they will become aware enough for insulation to be a real selling point."

Will it involve extra costs for builders and consumers?

"No. Although it is not well understood yet, the smaller heaters which are required to heat an insulated pool means you lower capital costs. We have had a case where the pool builder installed a heat pump which was two models below the recommended manufacturer's size and yet the pool being fully insulated allowed the pool to heat adequately to the required 30°C."

Will pool builders need new training?

"Yes and no. Materials can be purchased from insulation suppliers and ourselves with no training required. However, it is worthwhile training with Thermapool because of our special Government approval rating. Once trained with us, a swimming pool installer is accredited to apply for these grants. In a competitive market this is the sort of advantage that helps to close a sale and generate additional revenue from existing customers."

Given that most parts of the Building Regulations get updated every 8-10 years, why has the pace of changes been so fast with Part L?

"2013 is seen as the last time there will be

AQUAFLEX AND THERMAPOOL OFFER TRAINING WITH PART L REGS

Since October 2010 the fact that companies installing swimming pools are required to submit calculations to local authorities, together with drawings, showing that the construction method complies with the new regulations has focused the mind of pool builders.

Basically the floor and walls (basin) of any new pool build contained under a building must have sufficient insulation to satisfy the new regulations.

In February next year Aquaflex and Thermapool are running a joint seminar where attendees can learn more about pool insulation, on-site lining and news of other Aquaflex products due to be unveiled in the New Year. The event takes place in Stevenage on the eve of SPATEX in Brighton.

Aquaflex have been keeping a close eye on these important developments and working in conjunction with pool insulation company Thermapool; and using their much respected skills in liner manufacture, they have perfected a method enabling them to accommodate insulation on new liner pools when installing either a pre-tailored liner or the Alkorplan on-site lining system. The method is perfect for new pool builds but has been cleverly designed so that it also may be incorporated as a retrofit installation for those pool owners and operators who wish to bring their pool up to regulation standards and make sizeable energy and cost savings.

During September this year Aquaflex Director Neil Dalziel installed Thermapool on his own pool; which is covered with an Abrisud building and was pleasantly surprised to witness that it really does, 'do what it says on the tin'. "The ambient temperature dipped significantly at the end of September through to early October and the pool had not been heated for some time prior to that," said Neil. "On a day when there was a very small amount of sunshine and a temperature of 15°C the pool water rose to 17°C and stayed at that level for several days, despite a definite autumnal chill in the air. Installing the panels was straightforward, the pool looks the same as it did before the insulation was added and I am already convinced we will save on heating next season."

Said Nigel Rose: "This will be a combined show and training day and will show delegates the benefits of insulating their swimming pools correctly.

"Thermapool installation training, which allows contractors to claim Government energy saving grants, usually costs £350 so

Aquaflex Director Neil Dalziel installed Thermapool on his own pool and was pleasantly surprised to witness it really does 'do what it says on the tin'



this is a good opportunity.

"There are a number of commercially available products claiming to insulate swimming pools which are really not suitable. Materials commonly used in building and in structures for insulation are not suitable for swimming pools because once wet, their insulation property is rendered useless. This is surprisingly not well understood yet.

"It is not overstating the case to say that money spent on such materials is wasted! We will also give people information on the grants and interest free loans which are available to all swimming pool builders who are looking to insulate correctly.

"Case studies show how pool builders have seen a significant rise in swimming pool sales, in sales of materials and labour and also increases in profits. These increases come through installing insulation both at new build stage or on liner changes.

"We will offer practical installation training and demonstrations on installing insulation and on rendering on to insulation ready for tiles or liners."

The Swimming Pool Insulation – Presentation & Training Day is being held on Friday 4 February next year at the Holiday Inn, Stevenage A1(M) and will include:

- The new swimming pool building regulations explained
- Types of insulation
- How to reduce swimming pool heating costs
- Insulation case studies
- Practical insulation training
- Government accredited insulation grants

Limited places are available at £35. Call to reserve your places on 0870 166 2532.

FOR FURTHER INFORMATION

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improved standards to insulation values as it is believed that the thicknesses of insulation have reached an optimum. After 2013 the key focus for building regulations will be on site renewables such as solar cells on roofs. Over the following years there will be bigger incentives for people installing Photovoltaic (PV) and solar heating. BRE Watford has examples of future thinking houses. The aim is to get to houses that do not use electricity from the grid. What they may use at night they will put back during the day, by means of on site generation.”

Visit www.bre.co.uk for more information.

Pool builders have considerable flexibility in how they achieve their CO₂ emission target, but will this alter pool designs?

“No. All pools can be insulated.

Thermapool has no shape or size limitations. Other insulation methods tend to be limited to angular designs.”

What are the implications for heat pumps?

“I was involved in the Microgeneration Certification Scheme (MCS) steering committee on writing a standard for swimming pool heat pumps in 2008 after DEFRA decided there should be a Certification Standard for swimming pools and MCS was the best scheme for it. None of the manufacturers have gained this certification for swimming pools as shown (see www.microgenerationcertification.org). Many manufacturers have enquired, yet none have gone through with this – I’m confused as to why nobody would want to gain certification. Heat pumps seem to be the buzz word in the pool trade. However, what is too little understood is that how heat pumps are installed makes a massive difference to their performance. It could also hinder their performance. Again, there is little awareness of this.”

INSULATION SYSTEMS FIT ANY SHAPE OR SIZE OF POOL



Insulation systems can fit all shapes and sizes – this kidney shaped outdoor tiled renovation project in Edinburgh included the pool being insulated

Swimming pools don’t have to be square to wrap up warm and take advantage of the latest insulation systems! Oval, kidney shaped or curvaceous and even DoughBoy pools – your designer pool shape is no problem according to Nigel Rose, Director of Thermapool who said: “Our insulation materials can fit any shape or size of indoor or outdoor swimming pool. Many pool owners and builders don’t realise it’s possible to retrofit Thermapool to shaped pools. An example from our portfolio is a kidney shaped outdoor tiled renovation project in Edinburgh. Our clients, Jane and Steve Haggerty are delighted with the results,” said Nigel.

Steve and Jane Haggerty say: “We have successfully completed the pool renovation, heating the pool and are

delighted with the results. It seems to heat much quicker than before and certainly retains the heat more.”

Nigel Rose said: “Our system cuts 86% of heat loss. In warm weather in the summer on outdoor pools, using our pool cover, your Thermapool insulated swimming pool will not require any other heat source; we only know this because that’s what our customers tell us.

“The Haggerty’s pool measures 12m x 5m x 1-1.7m and have experienced the benefits of a warmer pool, a longer swimming season, lower energy bills as well as the benefit of qualifying for a Government energy saving grant for reducing their CO₂ emissions. Previously the pool was painted which was removed ready for the insulation.”

POOL BUILDERS SET FOR FORMAL VENTILATION INSPECTIONS FOR PART F

Whereas Part L of the Building Regulations exists to promote energy efficiency, Part F sets out to ensure there is adequate ventilation for people in buildings.

The immediate impact for the pool trade is that the new regulations in force from October includes legal requirements for inspection and commissioning of ventilation systems and also provision of operation and maintenance information.

Since the 1960s links have been made between bad indoor air quality and poor occupant health, frequently referred to as sick building syndrome. A growing number of studies have clearly demonstrated the link between ventilation in buildings and the performance and health of their occupants.

Part F of the Building Regulations deals with indoor air quality

and in simple terms buildings comply with Part F: “where a ventilation system is provided that under normal conditions is capable of limiting the accumulation of moisture which could lead to mould growth and pollutants originating within a building which would otherwise become hazardous to the health of the people in the building”.

One increasingly popular technique with designers is the use of a ventilation system with heat recovery capability. Heat recovery systems reduce energy costs by extracting stale air from the building and recovering the heating or cooling energy to either warm or cool the incoming fresh air. A good heat recovery system can save up to 30% on initial capital costs of heating and cooling equipment as well as lowering energy costs.

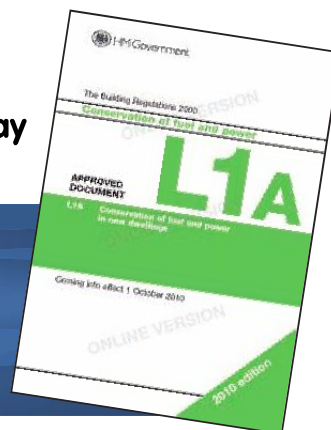
THERMAPOOL & **AQUAFLEX** invite you to

Swimming Pool Insulation – Presentation & Training Day

Friday 4th February 2011. Holiday Inn, Stevenage AI(M) Herts.

GAIN COMPETITIVE ADVANTAGE

- ◆ Discount Vouchers From Thermapool and Aquaflex
- ◆ Government Accredited Pool Insulation Grants
- ◆ Pool refurbishments using Carbon Trust Interest free loans
- ◆ The new Aquaflex liner material in conjunction with insulation



**THE TRADE
EVENT YOU
CANNOT AFFORD
TO MISS.**

EXPERT ADVICE & TRAINING

- ◆ The New Swimming Pool Building regulations explained
- ◆ Types of insulation explained
- ◆ Learn how to reduce swimming pool heating costs
- ◆ Insulation case studies
- ◆ Practical insulation training
- ◆ Training on boosting sales and profits

**Become an
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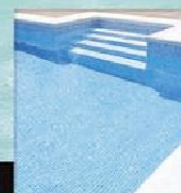
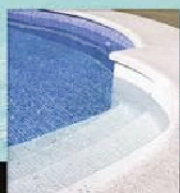
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