GLASS OF THE FUTURE

At the end of October, Toughglass gave the construction industry a glimpse into the future at a seminar, held at their headquarters in Kilkeel and sponsored by Pilkington Plc. Fielding a strong team of speakers covering topics such as Window Energy Rating, Document L Update, and new toughening possibilities in Toughglass, the presentation by Ian Stokes, Pilkington's national Product Manager, spelt out the advantages of self - cleaning glass.

Delegates to the seminar were welcomed by John Agnew, Managing Director of Toughglass, and Gordon Coulter, Chairman of the Coulter Group. John charted the company's development over the years, starting with flat tempering glass in 1989 and little experience in glass, to a position where they now supply 85% of the shower glass used in the UK and the RoI. They made many mistakes, but by 1993 they had installed a second furnace and by 1995 a third. One of the company's key alliances was forged in 1994 where Pilkington became the Toughglass Preferred Glass Supplier - a move which opened doors for them through customer introductions and innovations in glass solutions. The company's biggest gamble was taken in 1997 with a £9 million investment in curved glass. In 2000 they forged an alliance with Curvet Spa and in 2002 appointed Emmanuel Bourdin as Business Development Manager. Emmanuel had been with St. Gobain before joining the Kilkeel company. Toughglass was the first company in the world to bend Pilkington's Active glass - the world's first self-cleaning glass.

Ian Stokes explained that Pilkington Activ ™ is based on a 'dirt eating' photocatalytic reaction and on a 'waterloving' hydrophilic coating which act together to break down the dirt and clean it off. Pilkington Activ Suncool™, a range of three self-cleaning, solar control and Low E glasses are in demand by architects. The advantage of the glass is greater design freedom, because greater areas of glass can be used. It can also be used in areas where it can't be accessed or cleaned easily. Activ™ can also help cut costs by eliminating the need for tilt and turn windows and the need for cleaning. He explained that the best way to describe Pilkington Activ™ is as 'continuously self cleaning windows'. Pilkington Activ™ reduces the need to clean the glass as a result of natural dirt build up; it prevents droplet formation on the surface during rainfall and enables the window to dry quicker and cleaner. It also destroys dirt on the surface.

Emmanuel Bourdin outlined the possibilities in Toughglass and what the future possibilities will be, illustrating curved toughened glass used in staircase design, balustrades and balconies, demonstrating that glass can be convex, or concave or both - whatever the designer wants.

Architect Rick Wilberforce from Pilkington updated the delegates on energy efficiency and legislation relating to glazing, demonstrating the performance rating for Low E windows. Specifically he highlighted the proposed changes to Part L. He also pointed out that the 'Energy Performance of Buildings' EU Directive published in 2002 must be enacted by Member States no later than 4th January 2006. The Directive covers both new and existing buildings.

Building Regulations have a major impact on the glass business. As an example he cited the RoI. where for instance every conservatory built now must have Low E glass - but the same does not apply in Northern Ireland as yet. Low E Glass is more thermally efficient than triple glazing. As an illustration of the impact of the new regulations he pointed out that the consultative Document on Part L (Part F in N.I.) is 300 pages.

According to Rick Wilberforce the new requirements will spawn a whole new breed of consultants because energy certificates will be required for all buildings. Northern Ireland's objective is to reduce energy usage by 1% from 2007 - a clear objective.

"Buildings consume 50% of all our energy, more than transport and industry combined, so buildings will be the major sector to deliver energy targets." the new Directive requires that a methodology for calculating the total energy performance of buildings has to be developed, and this must be the basis of future Building Regulations requirements, he said. "A system of energy certification of buildings has to be developed, and every new building or existing building when sold or rented, must have an energy certificate." This requirement will have a huge impact on the glass industry and on the future design of buildings.

•Ian Lush, Chief Executive of the Architectural Heritage Fund, Peter Marlow, Chairman of the Ulster Architectural Heritage Society and Richard Rogers, Chief Executive, Environment and Heritage Service at the launch of two new publications on buildings at risk, and skills

PUBLICATIONS LAUNCH

The Ulster Architectural Heritage Society and the Environment and Heritage Service launched the directory of Funds for Historic Buildings in Northern Ireland and the Directory of Traditional Building Skills at the Old Belmont School in east Belfast in early October 2004.

The free publications are designed to provide timely assistance for owners of historic buildings seeking help to fund a restoration scheme as well as giving details of professionals, craftsmen and suppliers with experience of older properties. They are complementary to the on-line Register of Buildings at Risk in Northern Ireland (BARNI) launched by the Minister for the Environment, Angela Smith in February 2004.

Speaking at the launched of the directories Ian Lush, Chief Executive of the Architectural Heritage Fund, whose national conference on Community-Led Regeneration was held in Belfast from 7 - 9 October said, "I am delighted to be at the launch of both publications which will be of tremendous benefit to the public. It is crucial that building owners have access to relevant and useful information and I know that previous directories have helped countless numbers of people. The latest editions should assist greatly in the fight to save historic buildings in Northern Ireland from dereliction."