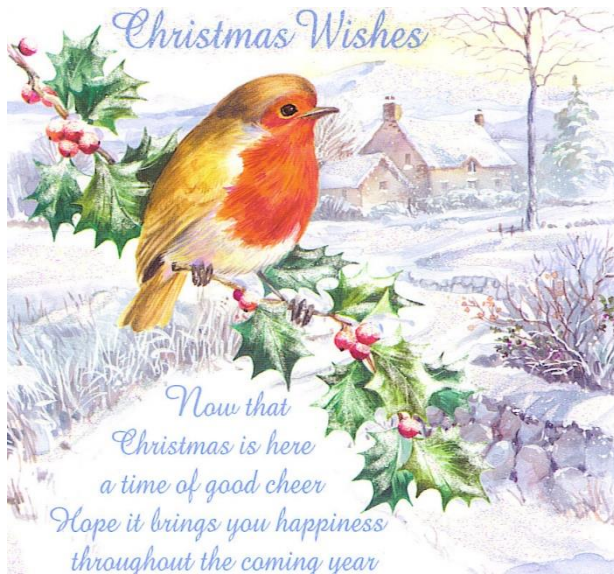




December 2018



The Executive committee wish all our members and their families a very happy Christmas and a prosperous New year

Swansea

Urban Village, Swansea – Regeneration



CS Wales said: "Initiated through a £25m scheme to aid the regeneration, redesign and rebuilding of the High Street and Strand Row areas of Swansea, Urban Village is a vision of sustainable living and working: intimate, yet connected and cosmopolitan, strong on identity and character, but also contemporary.

"With the development now complete, Urban Village continues to exemplify social, economic and physical regeneration in the area, drawing ever increasing levels of related activity to it, resulting in spill-overs which have already begun to fuel sustainable economic growth in this formerly deprived and neglected area of the city."

Robot is doing away with Bricklayers

A three-bedroomed house has been built by an Australian robot, Hadrian X in less than three days. It was the robot's first full-home structure and was completed in a total elapsed time of less than three days. This achieves a milestone set by the company, Fast brick Robotics (FBR), in 2015.

The house has an area of 180 m² and includes two bathrooms as well as the three bedrooms. Construction followed factory acceptance testing (FAT) at FBR's test facility, where the Hadrian X was put through its paces on three key tasks: a two-course structure with a full combination of brick sizes, cuts and laying configurations;



- an 11-course pillar structure to demonstrate the Hadrian X's ability to build from slab to cap height;
- a two-room structure demonstrating the Hadrian X's ability to build a larger structure on a slab from a 3D CAD model with the required accuracy.

Hadrian X then started work on its first full home structure. After completion, the structure was verified as meeting the relevant building standards by a civil and structural engineering consultancy group.

Counter Terrorism Blocks

Tarmac has produced a new building block that is claimed to have unrivalled blast protection qualities. **A pair of BBX blocks** BBX is a construction system that provides dual protection against blast and ballistic threat, uniquely achieving C15 blast resistance and BR7 ballistic resistance.



The BBX block system is similar to concrete blocks, composed of cement and fine aggregates, but with a difference, using bespoke materials instead of stone aggregate as part of the mix. This material provides the block with substantial tensile capacity and

vastly increased shear modulus, allowing the product to flex under force and dissipate the energy of a bullet and blast overpressure and preventing internal spalling.

When compared to reinforced concrete and other equivalent blast or ballistic related materials, the BBX blocks are the same weight

as a normal solid dense concrete block, and can be installed using traditional methods, incorporating their thin joint system.

Tarmac Building Products head of new product development Paul Beswick added: "BBX means for the first time we are able to use a single solution to terrorism and other armed threats. The system uses standard construction methods – this means building design is not negatively impacted and constructions costs can be kept down because the installation is both straightforward and time-efficient."

Pictured below is a BBX wall after being fired at with 30mm Rarden cannon shells fired from a Warrior IFV F510. The photograph shows the three rounds fired into each of the three target areas at the wall, with no penetration.



Fees

Please note any member who has not yet paid 2018 fee will be expelled under Rule 3 (d) anyone found still using the letters after their name Rule 7 (b) & (d) action will be taken

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