

New building¹¹ system a budget beater

Local authorities continue to explore new ways of delivering public services more sustainably and efficiently following further recent reductions in central government funding.

This will force local authorities to further challenge their current approach to ensure that all available capital investment can achieve the greatest combined key benefits to the community. In addition, creating real employment and addressing priorities such as social housing, health and care facilities, reducing carbon and providing sustainable solutions, are common themes that must be positively tackled.

There are many successful examples of innovative approaches to procurement in the public sector such as well tested partnering contracts, private/public joint initiatives, cross boundary funding etc. Equally, there are even more "show case" demonstration projects using new materials, assembly technology and off-site methods of construction that are faster to build and represent great value. We, the design professionals associated with public sector clients, continue to search for creative and viable design solutions and funding opportunities to ensure value for money in public investment.

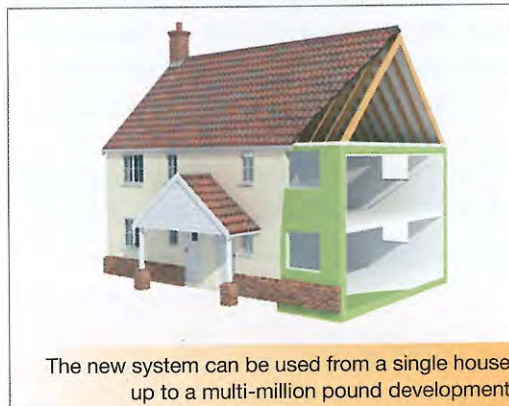
To achieve this end, the Norse group has launched a new joint venture with an innovative Norfolk company, bringing energy busting technology within the reach of everyone from housing associations and local authorities to self builders and private developers.

The new company, Beattie Passive Norse, even offers a construction lifeline to the unemployed and youngsters in Further Education and apprenticeship schemes. It is a joint initiative between the Norse group - a company which works across the UK but is wholly owned by Norfolk County Council - and Hethel based Beattie Passive Build System Limited.

The new system featured in the Beattie Passive Norse joint venture can be used to any specification or design style. Beattie Passive Norse uses 'Passivhaus' methodology* to deliver a complete build system certified by the Passivhaus Institute in Germany and is the only company in the UK to achieve this certification to date.

This tried and tested solution by Beattie Passive is a unified building system in timber construction.

This single trade technology is light-weight, quick to assemble, dry construction with a high degree of precision built in. The entire timber-framed envelope is filled with cellulose insulation to form a consistent and non-interrupted "coat" to the timber frame envelope. Thus, this patented system achieves excellent "U" values, excellent air tightness and acoustic performance, whilst remaining competitive on cost.



The new system can be used from a single house up to a multi-million pound development

Beattie Passive Performance

- Code 3-6 and Passivhaus structure for less than your current build costs.
- Full design flexibility - any building, any shape.
- 90% reduction in heating requirements.
- CO₂ emissions can be cut by as much as 100%.
- Higher levels of fire safety, sound-proofing, thermal efficiency and air tightness.
- Fast on-site erection.
- Minimal on-site material wastage.
- Only semi-skilled labour required for erection.
- Sustainable materials from a fully certified supply chain.
- Easier inspection as all structural elements are open.
- LABC registered approval.

Not only it is quick to build, it requires only basic carpentry skills; therefore it provides an ideal training platform for young people whilst creating a route through to jobs and employment in the long term. ▶



Sui-Te Wu

Group Design Director
NPS Group

T: 020 7940 3450
E: sui-te.wu@nps.co.uk
W: www.nps.co.uk

12 New building system a budget beater

"This single trade technology is light-weight, quick to assemble, dry construction with a high degree of precision built in."

Externally, the envelope provides a blank canvas for the architect to articulate their understanding of the contextual settings and inject creativity through a selection of suitable finishes from a versatile range of cladding materials. Alternatively, where appropriate, the timber framed envelope can be left with minimal cladding.

Also, internally, the design is sufficiently flexible to incorporate electrical and plumbing installations and partitions and does not require a long design lead time. The construction can start immediately after finalising the design, a tremendous advantage over a number of off-site construction methods where the design needs to be frozen in order to confidently commence manufacturing, before installing on site.

Beattie Passive Norse will embark on their first construction project to provide local authorities' much needed social housing provision in East Anglia. Planning approval has already been granted and Beattie Passive Norse is preparing to mobilise on site. Preparation for the application of data rich information modelling is underway. Engagement with the local authority and colleges for the apprenticeships has also been progressed. Mike Britch, Managing Director of Norse Group, said: "Its simplicity makes this solution so attractive to all markets and sectors and is at the forefront of changing the way we approach construction and building in general. It's not just the speed of construction, the cost effectiveness of the solution or that every building is tested and commissioned, it is much more than that."



For Further Information

Richard Gawthorpe (Managing Director) Beattie Passive Norse will be happy to discuss the Beattie Passive Norse solution in more detail on 07702 556965.



Scaladiary

September

- 6 NW Region meeting venue tbc (contact Mike Kivlehan T: 0151 237 4101)
- 12 ACA introduction to PPC 2000 and TPC 2005 for Consultants at Alan Baxter Gallery
- 13 SCALA Policy Committee, Forum & Council in London
- 18 SCEME meeting in Wiltshire on engineering commissioning (contact Fiona Fanning T: 07730 267560)
- 19 ACA presentation on City Academies by Studio E architects at Alan Baxter Gallery
- 20 Eastern Region meeting on procurement/KPI's in Cambridge (contact Mike Phillips T: 01733 20711)

October

- 8 ACA PPC/TPC Awards presentation
- 9 ACA PPC/TPC Conference (SCALA member reduction)

- 10 or 17 Y&H Region meeting in Hull on Design for Sport (contact Roosje Barr T: 01274 433887)
- 15 London & South Region meeting at HOK office (contact Mukund Patel T: 01428 727747)

November

- 8 Presidential Dinner/CBoY Award Ceremony in Bristol
- 22 NW Region meeting venue tbc (contact Mike Kivlehan T: 0151 237 4101)
- 29 SCALA Policy Committee, Forum & Council in London

December

- 4 SCEME meeting in London on Baseline Designs (contact Fiona Fanning T: 07730 267560)

ACA Council dates and information go to www.acarchitects.co.uk or contact Shona Broughton T: 020 8325 1402



For more Modern Methods of Construction information go to the articles on the Knowledge Base.

www.publicarchitecture.co.uk

Information and technology for construction & architecture in the public sector