

MatUK Construction Working Group

Community Meeting on Housing 3rd July 2007 at DTI

Aim

The aim of the meeting was to brief the wider construction materials community on work to date and gain feedback on the critical issues from the community for housing. The main questions were:

- What are the major material (and product and system) challenges for the Housing industry over 5, 10 and 20 year timeframes (materials R&D agenda)
- What are the barriers to achieving these goals
- How can we increase our chances of success

Format

The morning session comprised presentations setting the scene and giving background information. After lunch, breakout groups were asked to consider the questions on the issues of challenges, barriers and opportunities to moving forward.

- Registration and coffee
- Chairman's opening remarks
- Scene setting and the Government view of why materials matter, Professor Michael Kelly, Chief Scientific Adviser, CLG
- What designers need from the industry, Rory Bergin HTA Architects
- Dr Pete Walker, BRE Trust Chair, Innovative Construction Materials
- Tying in with other strategies, Jeremy Sumeray, Seconded DTI
- Questions
- Breakout Sessions

Presentations

Available presentations are attached.

Feedback from Breakout Sessions

- What are the major material (and product and system) challenges for the Housing industry over 5, 10 and 20 year timeframes?
- What are the barriers to achieving these goals?
- How can we increase our chances of success?

Group 1:

- There was general concern about the timescales being set for the Government targets being extremely tight.
- The added value aspects must be configured to the consumer.
- Materials and products will need to be multi-functional to meet the targets.
- Concern about the level of skills and training in the industry and the changing skills that will be required in the future.
- There is a general lack of investment in volume production for new materials and products, and this will need to change.
- There will also need to be funding / incentives for the consumer.
- There are several barriers and challenges to overcome:
- The whole issue of the cost of these new homes.
- Attitudes in the industry, which tend to be conservative and risk averse

- The general lack of R&D in manufacturing industries
- Too many Government initiatives and changes, an expectation that the goal posts will keep moving.
- Waste management is key to achieving the targets.

Group 2:

- Challenges:
 - The roles of products are changing and becoming multi-functional
 - We will need to form partnerships, but the industry is not used to doing this
 - Too many 'fads' and changes to policy and targets
- Barriers:
 - The cost of developments in manufacturing
 - The targets may change
 - Uncertainty about Government funding
- Increase chance of success:
 - It was suggested that the best approach may be to make decisions quickly on a feasible approach and then focus on delivering this. It may not be optimum, but at least we will deliver something and learn a lot along the way, to improve further in the future.
 - A mix of 'sticks' and 'carrots' are needed.

Group 3:

- There is a clear need for a good, user-friendly modelling package, perhaps based on SAP, which can be used to assess the vast number of potential combinations of products and materials, along with different designs. The trade-offs between different options need to be assessed quickly and accurately.
- We need pull from the consumer end, rather than just push from technology, but sensible limits (eg the laws of physics) need to be applied.
- A whole range of superb materials have been developed for specialist, low volume applications (such as NASA's development of the shuttle insulation and many developments in Formula 1), the key challenge is how to turn this type of material into a mass produced and cheap product that can be delivered by the construction industry supply chain.
- We must work together more, rather than as separate companies and sectors, but we have no real experience or mechanisms for doing this. We also view our buildings as separate functions (load bearing, insulation, security, etc) rather than combining functions.
- House prices are not primarily determined by functionality, but by the local market demand.
- The market won't pay for extra performance. The big issue will be net cost.
- Mortgage lenders have the money and need to be engaged.
- The new products need to be 'transparent' to the user rather than requiring lots of maintenance and manual intervention.
- Solutions must be robust, reliable and low maintenance.
- Combinations of materials in integrated products and systems make recycling more difficult.
- Universities can usefully work on the underlying science and understanding, but they need more direction from the construction industry.
- There is a large gap between universities and industry which often leads to excellent basic science not making it through to the mass market. In other

countries there are institutes which help to bridge-the-gap (eg Fraunhofer in Germany).

- The construction industry is too fragmented and adversarial.
- There is a need to be more open and form partnerships where we share information and collaborate, rather than keeping everything secret and working individually.
- The existing building stock may well need different products and materials for significant improvements, to new build.
- Incentives are key. There need to be incentives and benefits down the whole chain to drive the process in a positive way, rather than just the threat of not conforming to new building regulations.

Next Steps

The Steering Group will be meeting in September to consider the feedback and assess next steps, as well as planning for further community meetings focussing on non-domestic buildings and infrastructure.

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