



Economics and Programme

Cost of construction is related to use of materials, labour, specialist components, equipment and machinery. Cost is also heavily influenced by time-related factors. Steel construction achieves high levels of productivity leading to reduced labour costs both on-site and in the factory. Light Steel Framing offers considerable benefits to the developer or builder in terms of speed of construction, reliability and reduced call-backs¹ as summarised below.

Speed of construction leads to the following potential savings in construction costs:

- a reduction in preliminaries
- a reduction in plant usage

Speed of construction leads to reduced cost of financing, as a result of earlier return on capital and improved cash flow.

Speed of construction involves not just the steel framing but also appropriate choice of claddings, linings, any infills, such as in-wall thermal insulation, and thermal breaks. These components must be compatible and expert advice should be sought. Many options are available.

Light steel framing offers benefits to the user or purchaser in terms of freedom from shrinkage and other movements

Insurance

Light steel framing is non-combustible, which reduces the risk of property loss during construction and over the life of the structure. This is certainly borne out following a series of high-profile fires in the UK on multi-storey timber frame developments during construction in Peckham, Camberwell and Basingstoke². In a response to a call for an urgent review by the UK Chief Fire Officers Association³, the Health and Safety Executive (HSE) has issued more stringent safety requirements⁴ to prevent fires spreading throughout a site, which means contractors must implement a range of temporary fire protection measures during the building phase when timber construction is utilized. The benefit of light steel framing being non-combustible has been long been accepted in North America where lower insurance premiums for builders and owners are offered⁵.



¹ Rogan, A.L. & Lawson, R.M. Building Design using Cold Formed Sections - Value and Benefit Assessment of Light Steel Framing in Housing, SCI P260, Steel Construction Institute, Ascot, UK

² <http://www.timberframefires.co.uk/>, accessed April 2013

³ <http://www.cfoa.org.uk/11064>, accessed April 2013

⁴ <http://www.hse.gov.uk/press/2010/hse-constructionfire.htm>, accessed April 2013

⁵ Steel Framing Alliance, <http://www.steel framing.org/insurance.html>, accessed April 2013

