

# MATERIALS - DELIVERY, STORAGE, PROTECTION & QUANTITIES

DATE: 1<sup>ST</sup> DECEMBER 2004

ISSUE NO: 5

## Material Delivery

The materials required for the erection and completion of the timber frame will be delivered to site to tie in with their sequencing within the shell erection process, and arrangements may vary from project to project. Materials required for the main shell erection will be despatched to site from our Factory on Day 1 of the shell erection programme, with the roof trusses and windows generally arriving one or more days after the main delivery, depending on the speed of the erection. Also arriving along with the main delivery will be the majority of the timber required by the builder for his element of the work to be undertaken on completion of the shell erection.

Some of the materials needed by the builder will be delivered to site direct from our suppliers. Items such as insulation and plasterboard fall into this category. It is your (you = as a self builder) or your appointed builder's responsibility to 'call off' these materials as and when they are required on site. For further information regarding material deliveries, please refer to Scandia-Hus Fact Sheet No. 14 – Delivery Day and Shell Erection - Programme & Arrangements.

## External Material Storage

External wall panels and roof trusses are normally off-loaded straight from the delivery lorries and onto the slab. As a rule they therefore require no special storage facilities. However, other 'loose' timber, such as partition studs, joists, roof timbers, combi-board, sarking board, plasterboard support battens, etc. will need to be stored on bearers - as flat as possible - and covered with opaque tarpaulins. Do not use clear or tinted polythene during the summer months, as this tends to trap excessive heat, causing good quality timber to twist, split and warp to a point where it may become unusable. (Please note that the VCL provided is not for protection of materials.)

Materials stored under tarpaulins will need to be constantly monitored, as wind and rain can create unintentional 'sails' and 'above-ground ponds' within the covers. Small birds may thank you for providing them with perfect swimming pools, but neighbours are seldom impressed by flying tarpaulins landing on their prized BMW!

As the building programme progresses, chipboard, plasterboard and insulation materials will be delivered (subject to the builder's call off). These materials will also require protection, using tarpaulins.

Suitable tarpaulins may be obtained from virtually any builder's merchant or DIY store. They are often coloured blue or green and have bound edges with eyelets so that rope can be used to create 'material packages' where prolonged storage periods are predicted. Tarpaulins utilized to cover constantly used materials are normally weighed down with concrete blocks, bricks or large and heavy scrap pieces of timber. A typical Scandia-Hus project will require approximately four 4.8 metre x 2.4 metre tarpaulins.

## Secure, Dry Material Storage

In addition to components that can be stored outside as described above, you or your builder will need to provide a secure and dry storage area on site (or close-by) to keep and protect valuable and/or vulnerable materials until they are required. Windows and external doors must also be stored under cover until they are fitted into the wall panels, and second fix joinery items need to be protected immediately upon delivery to site, by placing in a dry store. Builders often hire a steel storage container for this purpose, but a garage, large, secure shed, barn or other such structure will also be suitable for this purpose. Where circumstances permit, a pre-built garage associated with your new home, may be the ideal solution.

A Scandia-Hus building set delivery comprises many valuable items, requiring secure storage. These include items such as nails, plasterboard screws, metalwork, rolls of damp proof course, tubes of silicone, vapour control rolls and tape, a post box, flooring adhesive and screws, not to mention bundles of skirting boards, coving and other finishing timbers, which are sent to site on initial delivery loads. These and other components should be safely stored on the day of delivery.

Flooring chipboard is normally not 'called off' until the basic shell has been completed, and can then be brought straight into the structure and placed on the slab. The boards should be stored flat, in piles of a maximum of 15 boards high (or 8 boards high when stored on a suspended floor). Before laying, the boards need conditioning by being stored for approximately 7 days in the room to be floored, in order to acclimatise the boards to the moisture content in the building at the time of installation. Failure to do so may result in bowing boards and ill-fitting joints, and the suppliers take no responsibility for this type of site created problem.

Later on during the building programme, other vulnerable materials (e.g. staircases, pre-finished internal door sets, woodblock flooring, etc.) will arrive on site. These may need to be stored temporarily (possibly off site) before installation in your new home. They should preferably be kept in a warm storage area at a temperature of between 15 – 25°C and a relative humidity of around 50 – 60%.

In addition to its use as storage of materials and components, a dry store will also be useful for keeping wellies, buckets, rain jackets, tools and other items safe and dry. However, remember that if the unit is locked, the shell erection team will need access to the materials stored within for the duration of the shell erection period. Whatever the facility, the store needs to be at least 4.8 metres long internally and roughly 2.4 metres wide and 2.4 metres high. It needs to be accessible via a firm, mud-free path and placed where it will not obstruct any other activity. It should, of course, also be possible to easily access and remove any portable structure after use.

If you opt for a storage container, you should be able to hire one from a local plant hire company or a specialist site-accommodation hire company. You will need an 18' x 22', all steel container, including delivery and collection by a lorry equipped with a mechanical loading arm. You will probably need to hire it for about 10 to 12 weeks, perhaps longer, depending on the size of your new home and the speed of construction. Some large projects, or those with multiple buildings, may require more than one container.

### **Materials Protection During Construction**

As materials and components are installed, you should give serious thought to protecting them from damage from subsequent building operations. The first items requiring your immediate attention are Scandia-Hus' pre-finished and pre-glazed windows and doors. Immediately upon installation, you should protect both faces from accidental damage, as the glass can easily become accidentally scratched by other trades or by mortar splashes. Numerous methods of protection have been observed on sites, ranging from simple polythene sheeting draped across windows and doors, to purpose-made polythene-covered timber frames temporarily screwed into position. The choice is yours. Effective protection always shows in the quality of the finished product, namely your new home.

### **Material Quantities**

The quantities of materials required for the completion of the timber frame have been computer-generated from the final working drawings. A Production Lists, listing all materials delivered, is provided with each delivery to site. The quantities supplied include an appropriate amount of 'wastage' and also allow for some 'misuse' of materials. The quantity of materials supplied will be adequate to complete the work, with some to spare. However, if additional materials should be required, please contact your Scandia-Hus Area Project Manager.

Before additional materials can be despatched, it is your or your builder's responsibility to ascertain why a shortage has transpired by checking the quantity of materials used in each location and reporting where a shortage may have arisen. Each delivery should be checked on arrival on site against the Production List provided (see Fact Sheet No. 14 – Delivery and Shell Erection – Programme and Arrangements), and claims for shortages or damaged goods be reported to your Area Project Manager within 28 days of delivery. Long-term claims for additional and/or replacement materials are restricted to a maximum period of 3 months after delivery.

**NOTE:** In respect of windows and external doors as well as internal doors sets, which are delivered from Sweden direct to your site, Swedish delivery conditions apply. This means that any damage or shortages have to be reported within 3 working days, or any claim will be refuted.

### **Scandia-Hus Operations Department**

Should you have any problems or queries with regard to the delivery, storage or protection of materials, please do not hesitate to contact our Operations Team at Scandia-Hus Manufacturing on 01243 – 771 168. You may also reach them via fax on 01243 – 776 397.