# Notes on Sales Order Structure

## Sales Order

This is the entire contract it can be split into Phases but this is only probably necessary if you expect there to be a series of deliveries that need completed, tied up and charged for during the lifetime of the project. It would typically be if you expect a project to take longer than a couple of months, and you would benefit from forecasting the work and the finance in easier to manage chunks. E.g. if you had an order for 40 houses of various types and in practice are addressing them in 10 at a time, I think it makes sense to divide the overall project management into four phases.

## Sales Order Item

These are the items that the customer thinks they are buying, so they have a product description that the customer would recognise, a quantity and a price. 5 of House Type A could be a line on Order as could 1 M-Line Chair. The products that the line refers to could either be catalogue, predefined products, or bespoke one-off items unique for this project. There are two types of product “Installation” and “Fabricated Product”.

## Customer PO

This is to record the formal commitments of cash from a customer to the project. The total Sales Order value should balance this, so as changes are made and Sales Order value increases or decreases, variation orders should be sought from the customer

## Sales Order Phase (Fases)

As described above. Even on small projects we will have one Phase, but we will hide this from the user, so that it doesn’t feel like an unnecessary tier. Invoices are raised against the phase, and invoiced/invoiceable can be compared to costs that have accumulated against the phase.

## Stage (Etapa)

This is not a such a fundamental part of the structure, but does give an additional perspective on where the costs have accumulated. If you are delivering several houses, the rest of the structure can drill down the costs into the individual houses and the Works Orders, but they naturally summarise up to the Sales Order Item entity. across the project it will be useful to see the summary of costs in the traditional construction areas (Ground work, Foundations, Walls, Ceilings, Services, Finishing etc). So, this element is only really relevant on construction and installation projects. Bascially, each Sales Item Component can be tagged to a stage.

## Phase Item

This is what we use for the bigger jobs to allocate quantities of the various sales items into the different phases of delivery. The Work Orders deal with actually making these quantities via the Work Order Allocations. The work order accumulates costs, and so these can be proportioned across the allocations so end up relating costs against the phase item.

## Sales Item Component

This is where we can split a Sales Item into a set of more focussed elements. E.g. a House could actually be split into numerous (20 or more) components that you want to raise production work orders for. The Sales Item Component is a quantity required of a “Product” which can either be a chunk of Site Installation work, or a Fabrication Product that is made from wood in the factory. You are likely to have some fabrication products (e.g. a 926mm wide door) which is reused time and time again in different products and on different contracts.

## Phase Item Component

This is sort of behind the scenes but is required for multi-phase projects to track the components that are make up the deliverable Sales Item. The users won’t have to worry about this, as by defining the components that make up a s Sales Item, and the quantities of these on each phase, the Phase Item Component records are derived.

## Installation and Fabricated Product

These are the definition of the work and materials involved in delivering or producing the “Component” of the Sales Item. They will include Drawings, lists of material requirements and list of labour requirements. Hopefully we will get some standard products being re-used many times, but many will also be one off and defined purely for the specific project.

## Works Order

This is the instruction to undertake installation work or manufacture a fabricated product. It will have a quantity and a reference to the specification (Installation or Fabricated Product). It will have planned start dates, provide tracking through to completion and attract costs as materials are picked, and labour performed.

## Work Order Allocation

This is the link table that explains which Phase Items the work order ends up relating to. This is so that costing can be wrapped back up into the Sales view of things. It allows us to consider the optimal approach to production in terms of consolidating like items into quantities even across different projects, but retain the ability to cost per Sales Item (actually per Phase Item)