

## Aaaaah DETAILS

They say “the devil is in the detail” so is the “angel”. Your challenge is to make the act of working out the details of how your lovely design will actually go together to achieve this “angel”.

An ordinary design can be enhanced by the details of materials and jointing of these materials as can an extraordinary design be severely degraded by poor choices of materials and their application.

### SO WHAT IS THIS “DETAILING”?

My version is the visualising of what your design needs to look like in its finished state and selecting the building/finishing components to meet that vision.

Then drawing the combined elements into a large-scale, single drawing so the various components can be made and assembled.

### FINISH

For instance, if you need a gloss surface effect, select only materials that either have this gloss as a natural surface or else can be processed to get that surface. Metal can be finished to achieve mirror gloss to finished (or abraded) matt finish.

### TEXTURE

Texture of the finished surface will be governed by issues such as your desired appearance and the effect of light to highlight the surface and its undulations. Texture will need to be considered relative to likelihood of damage/dirtying by inquisitive fingers or being bumped in day-to-day activities as well as the possibility of personal injury if the texture is pronounced/sharp.

### COLOUR

If the colour you desire is available as the natural finish of the material chosen you have a win! If not, then either search for alternative materials that DO give this colour or search for APPLIED FINISHES to the material that meet your needs. For instance, powder coating of metal sheet and profiles might do the job (this also comes in a range of surface gloss finishes). Paint may be an option too.

### MATERIALS

You have probably filtered the choices of material down to one or two options now based on the above.

This material has its own physical properties of

- a) sheet, extrusion, strip or block form (which affects the overall surface appearance of the object)
- b) ability to span between fixings (which determines the spacing of supporting framing elements) or whether the material needs a solid backing material
- c) Surface durability needs to be considered to ensure the finished surface lasts as you designed it for a time without significant damage or decay.

d) Protection of a sensitive surface material may require a protection coating or applied surface which could well change the effect you originally wanted.

### SUPPORT FRAMING

Your chosen material now requires a system of support framing.

This framing may be in a sheet or “batten-type” system, spaced to meet the needs of your material and located at edges or back from edges as required to allow jointing of the material pieces.

This support framing has its own needs of support and similarly to the finished material, this support will be governed by the thickness, spanning ability and rigidity of the support sheet/battens.

This support system may also be the wall framing system if the material spans the required spacing distance. Plasterboard or plywood sheeting is an example of this which can be fixed directly to the wall framing. (See my notes on wall framing)

### JOINING

The critical place where careful detailing thought is required is where materials join each other.

These joints can be between pieces of the same material or different materials. Here note that different materials have different shrinkage, fixing needs and spanning requirements.

Joining similar material does not mean that the finished surface will give a “joint-free” finish. Processed metals perhaps, but timber products will always vary in thickness and surface grain effect. Plywood often comes in sheets 1200 wide and with varying but determined lengths available.

Hey! As a designer you can sometimes go beyond these limitations by talking with the plywood makers to see what they can do for you and what changes you may need to make to your framing as a result. Purpose-made panels are possible within limitations both in flat sheet dimensions or in curved or bent sheet profiles so talk with the makers on this.

As joints are unavoidable, design them as elements in your design by spacing the joints to either relate to other elements in your design or by layout of the joints to show they are a “designed” element not a “near-miss disaster”.

To mask joints, carefully inspect examples of timber panelled walls in office buildings and restaurants to see if you can see the joints and note what they did to either show them as a detail element or conceal them.

Careful matching of timber and plywood grain patterns to achieve a controlled repetitive appearance is one possibility.

Very fine machining of the edges to get a tight-fitting joint perfect joint is possible, then careful sanding of the joint to ensure the 2 elements finish exactly in the same surface plane.

Expressed joints may be your choice and small rebated joints along the adjoining edges may work.

Sometimes a metal channel (either painted or natural) or contrasting timber strip slightly recessed/projecting can define the joint in a controlled manner.

Again LOOK at examples of what has been achieved elsewhere and decide how you could improve or vary the technique used to achieve your design aim.

### AL's DETAILING SYSTEMS

Hey, I'm no real expert so what I am writing here is a possible guide for you to follow if you don't have a system of your own. You are free to develop your own as you go as we all think differently and that's what makes design sooo much fun.

#### a) OUTWARDS-IN

In this system, you start with a line to represent your chosen final surface location.

Next apply the thickness of the surface material.

Support system elements are next added to carry the surface material and allow for its span etc as discussed above.

You now need to work out how to carry this support system, for instance, timber or steel framing, brick walls etc.

Your detail now shows the finish, its support and the base structure needed to make this stand up.

The space needed for this total construction can sometimes be quite large and if a slim structure is also part of your design, then a varied structure with a more-rigid or different framing system will be needed.

#### b) INWARDS-OUT

This method simply starts with the base structure (walls, floor frame etc) and then applies the support system needed for your final finish material then draw the finish material to complete the detail.

This gives a total thickness of structure and final finish similar to a) above but is relevant when you start from a given structure.

In both of these, the plan is to work out what carries what. From this, the thickness of the total system evolves and this is checked by you against what you originally intended. You do this by adding each layer of material or support realising what spacing and fixing is required to get the whole thing to work.

EXAMPLES OF DETAIL DEVELOPMENT are a separate series of documents