## **ENCLOSURE DETAIL DRAWING REQUIREMENTS**

**Intent -** The intent of a detail drawing in an architectural set is to convey the designers intent (as to function and appearance). To do this it must provide the builder, code reviewer, suppliers with sufficient information to provide and assemble the system in the field. Hence, numerous requirements are generated from this. In practise, detail drawings missing the information below are the result of lazy or ignorant designers – ignorance is by far the most common. No showing information on the drawings is explicitly not a defense for a designer, and has increasingly be used as evidence of incompetence in legal proceedings.

**Scale** – the drawings hould be to scale, although exploded slightly to show layers is important. Typical scales are 1:5 for manyenclosure details, and 1:10 rarely is sufficient for anthng but the simplest and largest scale systems. For special details of curtainwall sections for example, 1:2 details may be needed.

**Dimensions** of all important layers (insulation and sheathing thickness for example). Screws, bolt and nail sizes should be shown if important to the detail. Showing a projecting drip is not sufficient – a dimension should be provided if the overhang is important. Similarly, showing a slope implies that 0.01% slope is sufficient – the slope should be specified in % or rise:run measures. In cases where dimensions are critical, tolerance should be indicated to provide information of how precisely the dimension must be achieved. Spacing of intermittent items should be shown (200 c.c.)

**Specific Materials** – in many cases a specific material type or product should be identified, that is, Tyvek or #15 felt rather than houswrap and building paper, but bidding rules may require less precision. Specifications often take on some of this role, but are often not read by people on site and bidders – hence it is a practical reality that this information be provided on drawings. Never use functional terms such as "vapor barrier" or "sheathing" since "6 mil poly vapor barrier" and "exterior gypsum sheathing" (or "DensGlas") are much more accurate.

**Reality** – should be incorporated as much as possible. Layers should be shown overlapped as they are intended to be or butted as they are intended. Flashing must be shown arranged in the order intended, gaps allowed for construction (eg around windows) should be shown, and items like hemmed edges, cleats, backer rods, etc shown,

**Notes of Function** – notes describing the intended function of items, for example, sealant intended for air barrier continuity, openings intended for drainage or ventilation or both, metal coping intended as a rainscreen, peel and stick intended as drainage plane air barrier vapor barrier or all three. Specifically, the rain control approach and layers, air barriers, wind washing, and vapor control layers should be clear from the drawin.

**Innovations** are welcome, and have been used succesfully. Many drawings are now done on 11x17" since most offices have such printers. Color and fills, construction sequence drawings, and 3-D isometrics are all easy to use today given computer aid drafting tools. Key detail sheets for specific trades can be printed and laminated, and then given to the trades in the field to ease the application.