Shell, Cladding, Lining Adam Caruso

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The Walsall Art Gallery has an insitu concrete structure whose walls form the primary structure and define the main interior spaces of the building. Pre-cast floors span between interior and perimeter walls, the depth of the joist element of the floor construction is sized according to the space being spanned rather than to the structural span.

The structure of the building establishes the external profile of the gallery and a collection of differently sized interior spaces gathered together in close proximity. The whole of the exterior of the shell is clad. The interior is selectively lined to affect the character and scale of the different rooms of the gallery. The distance between the internal surface of the lining and the external surface of the cladding (approximately 600) allows for slack within which the requirements of the interior and the exterior can be subtly adjusted.

The external face of the 300 mm thick external concrete wall is the waterproof layer of the building. Onto this surface is placed a layer of 100mm thick insulation and is hung a rain screen. The base of the building and the inward looking faces of the high level restaurant tower are clad in a rain screen of mill finished stainless steel. Three panels of the 2 mm thick steel are cut from a 1500 mm wide coil, the resulting 444 mm wide panels have vertical butt joints and are up to 6 meters long. Ground level glazing is flush with the stainless steel panels and is vertically subdivided to give an even number of glazed panels within each opening. The stainless steel screen is the inner layer.

Onto the body of the tower is hung the outer layer of the rain screen, a more coarsely textured cloak of terracotta tiles whose scale reduces towards the top of the building. The tiles have a similar vertical proportion and the vertical joints shift in order to accommodate the internally determined window positions. The lapped bottom edge of the tiles and the corners of the building expose the 30mm thickness of the extruded terracotta units. The 600mm depth of the external wall is breached by windows formed with a welded stainless steel cage. The exterior of the cage is clad in mill finished stainless steel and flush structural glazing. The window cladding reinforces the impression of the stainless steel as an underlayer running beneath the terracotta overcloak of the building.

The largest and most public interiors of the gallery are formed directly by the shell of the building. The internal surfaces of the insitu concrete walls are made with vertical boarded shuttering of 75mm wide, planed douglas fir boards. Onto the poured walls is placed the pre-cast joists and planks of the floor construction. The frequency and scale of the joist members are spatially analogous to the timber ceiling of a medieval hall. In some locations a 75 mm thick lining of vertical douglas fir boards are placed onto the concrete. The scale and grain of this lining is the same as the surface of the concrete. The floor of the shell is a 125mm thick power floated concrete whose surface is pigmented with a black titanium hardener.

In the hall of the two storey suite the permanent collection galleries (the Garman Ryan Collection), the Douglas fir lining envelops the space, forming the floor, walls and ceiling surface. The 3m high galleries that are grouped about this hall have a douglas fir floor and ceiling and white plastered walls. The grain and scale of the timber ceiling can better hold the mechanical, electrical and security devices that are accommodated within the ceiling void. Timber skirtings, door reveals and window linings consistently project 30mm from the plaster surface. The scale and articulation of these galleries is designed to accommodate the small, residential scale of the Garman Ryan Collection, which will have a permanent hang.

The four 6m high contemporary exhibition galleries are formed by thick plenum walls finished in white painted 18mm thick medium density fibreboard (MDF) on steel studwork. These walls hold the supply air ductwork and are clearly sitting on the power floated concrete floor, stopping just short of the pre-

cast concrete soffit. A 120mm high continuous gap accommodates supply air diffusers, which provide general lighting. Spot lights and security equipment can be housed within the 600mm depth of the precast concrete joists.