Details of External Materials

ROOF STRUCTURE

The main hipped rooflight element of the roof structure will be constructed from lead. The roof will be designed and manufactured using a cold roof construction method. Timber rafters, with insulation cut between, allows a 50mm ventilated air space above the insulation. Timber rafters support insulation board and 18mm plywood decking which is then covered with a Code 5 mop roll lead finish to form an insulated and vented cold roof construction.

The garden room also incorporates a lean-to glazed link, this is constructed using Vale's unique roof system. The glazed roof aspect incorporates high performance double glazing supported by fine glazing rafters. The glass rests on structural aluminium glazing rafters and immensely strong integral frame. Externally, an aluminium glaze cap with attractive mouldings, secures the glass in position. This cap is powder-coated ensuring the longevity and low maintenance of the roof.

The roof glass is 6mm float, 16mm Argon filled cavity and a 6.4mm laminate. Furthermore, there is a tinted, low emissivity internal coating applied to the roof glass. This configuration offers superb thermal efficiency and the laminated glass will remain intact in the unlikely event of damage from falling tiles etc. Therefore, eliminating the need for immediate replacement when compared with a toughened glass equivalent. The laminate layer also provides a high level of UV protection.

The garden room is designed to incorporate a traditional classical eaves detail with a typical ogee style gutter. Rainwater will expel into aluminium downpipes.

SIDE STRUCTURE

Main frames, doors and windows are manufactured in a combination of painted Grade 1 Douglas Fir, Sapele and other timbers where appropriate all on hardwood cills. Side frames, doors and panels receive Protim pressure treatment, where appropriate, for long life and protection against rot and fungal attack. All timberwork is traditional mortice and tenon jointed and enhanced with decorative moulded edges and profiles.

The orangery incorporates one set of double doors and a single side access door. All door thresholds are fitted with a unique Architectural Bronze water-bar sitting on a large hardwood sill, stained in Walnut. The timber extension will sit upon a rendered base to match the existing property.

Side units are double glazed with an inner leaf of 4mm soft coat Low E glass, with an Argon filled cavity of 12mm, and an outer leaf of 4mm. All side glazing is a combination of standard float, with toughened units where required by Building Regulations.

The high walled area of the proposed orangery would be utilised as a 'living wall' to provide public benefit. It is also proposed that a water conservation system is installed (in this same area) to collect and re-use surface rainwater, drained from the proposal's gutter system.

It is proposed that an external extractor fan, for the kitchen, will be positioned within the high wall, the high of this external extractor is to be located below that of the boundary wall shared with No.7.