

Project: Elm Farm, Beck Row, Suffolk
Client: Orbit Housing
Main Contractor: Pentaco Construction

Project Value: £185,000
Product type: RAL 7016 PVC-u
 Windows and Composite Doors



In the shadow of Mildenhall & Lakenheath USAF air bases, this scheme to build 39 affordable homes for Orbit Housing presented a specification challenge to the Asset Fineline team due to the high level of sound and insulation requirements associated with it dictated by the location.

At the pre-start meeting held on site beforehand, this was appropriately demonstrated as a squadron of F-15E Strike Eagle jets flew overhead as they came into land.

RAL7016 Eurologik casements and French doors plus part M approved composite doors in a variety of complimentary colours were designed to meet the 43dBRw sound attenuation target.

Key deliverables for project;

- Significant sound reducing product requirements
- Close collaboration with Client, Contractor, Architect and Acoustic Consultants

To achieve the decibel reduction rating of 43RW, an acoustic sealed unit configuration comprising Soft Coat Low-E & 10.8mm Acoustic Laminated Glass was required. This added significant weight to the sashes, therefore requiring extra heavy duty hinges to be included.

Special acoustic trickle ventilation from Greenwood was needed to be specified to achieve the up-rated dB reduction requirement.

"Pentaco were pleased to work with Asset Fineline on this important scheme for Orbit. The technical challenges were overcome in a collaborative and proactive manner delivering a specification of product which was above the norm for this type of project.

The clients satisfaction with the finished scheme is a testament to the contribution of those involved at Asset Fineline to deliver a quality solution."

**Scott Savory, Senior Contracts
Manager for Pentaco**



Strict planning requirements stipulated an independent test was conducted to achieve the specification *"Details of the development that demonstrate that for each unoccupied dwelling and its associated sound insulation that noise levels with windows closed shall not exceed a daytime level of 35dB LAeq (16hrs) within living rooms, and a night-time level of 30 dB LAeq (8hrs) within bedrooms, using the methodology advocated within BS 8233:2014."*

A combined team effort between Asset Finline, Pentaco, the architect, the acoustics consultants and the client over a number of weeks meant a satisfactory solution was achieved to enable the right product solution to be manufactured and installed.

