



Sustainability

Derwentside Homes



Sustainability Retrofit

Client:	Derwentside Homes Ltd
Main Contractor:	Esh Property Services
Contract Value:	£0.2million
Role:	Contract Administrator Quantity Surveyor
Start Date:	September 2011
Completion Date:	May 2012
Form of Contract:	JCT Intermediate Form of Contract 2005
Delivery Partner:	Elvet Construction Consultants

» Overview

Derwentside Homes employed Elvet as lead consultants to deliver renewable home heating solutions to their off-gas properties at Glebeside, Satley. The project was in partnership with Community Energy Solutions (CES), a non-profit distributing organisation established with core funding from One North East and the Department for Energy and Climate Change (DECC).

The scope of works included the replacement of the existing solid fuel central heating and hot water system with a pioneering new system that included the installation of:

- Air source heat pumps
- Multi fuel fires, as a secondary heating source
- Solar thermal panels
- All three heat sources feeding into a thermal hot water storage cylinder
- Argon double glazed units
- Retrospectively upgrading the existing ground floor with insulation boards to increase thermal efficiency
- Increasing the insulation measures to the roof void and solid walls where applicable

All of the above measures were introduced to reduce carbon emissions, improve the thermal efficiency of the property, achieve decency standards and reduce fuel costs for the tenants.

» Our Services

Elvet were engaged as the Quantity Surveyor and Contract Administrator on the project from inception to practical completion, which involved the following services:

- Developing and implementing the procurement strategy, facilitating the tender reviews and providing the contract documents for both parties to enter into agreement.
- Undertaking the full Contract Administrator's role, as defined within the contract.
- Financial monitoring of the scheme including budget control, interim valuations, contractual variations and final account.



Project Management



Cost Management



Sustainability



Asset Management



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» Added Value

The tenants were keen to have their heating systems upgraded to a more efficient installation, though expressed a reluctance to embrace new and unfamiliar technology. To alleviate their concerns, we managed the modernisation of a vacant pilot property within the same street and organised an informal meeting with the residents to answer any queries and demonstrate the proposed system in operation. The event was a resounding success, enabling us to reassure the tenants of the benefits and gain their approval to commence work within their homes.

Due to the complex nature of the scheme the tenants were required to move into a transit property during the refurbishment to facilitate the retrospective insulation of the ground floor slab. Elvet developed a contract programme which allowed the tenants to occupy the pilot property during the modernisation of each dwelling. In addition, the respite property provided the tenants with an opportunity to become acquainted with the new heating system and raise any issues with the contract team in advance of their property handover.

» Additional Services

Elvet are appointed by Derwentside Homes to deliver their Energy Performance Certificates (EPCs) and Energy Stock Profiling Database. This gave us the opportunity to estimate the efficiency gains that the project could achieve prior to the client committing to all aspects of the scheme.

In addition, we have now been able to include the actual EPC data within our database. We can provide more accurate RdSAP ratings, average running costs and advise on carbon emissions associated with the new heating system, compared to the original.

» Conclusion

The project has successfully been delivered providing the tenants with a modern efficient heating system that not only meets the Decent Homes Criteria but exceeds it.

We are now approaching the first anniversary of the pilot property completion. This has passed without any reported issues on the new heating system.

The retrofit scheme resulted in the following results:

	Pre Retrofit	Post Retrofit	Gain/Reduction
SAP Band	52	67	15
Carbon Emissions	8 tCO ₂	3.5 tCO ₂	-4.5 tCO ₂
Average running cost*	£982	£801	-£181

*Average running cost based on heating, hot water and lights as a direct comparison against EPC, it excludes other appliances etc.



For more information please contact us.



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