

Worple & Worton Case Study

OVERVIEW



Removing residents from the damaging effects of fuel poverty was the single primary objective of client, Hounslow Council, when considering the Worple and Worton energy rejuvenation project.

Underpinned by the borough's 2019 net-zero strategy and the Mayor of London's promise to "create a cleaner, safer and greener living environment", the Worple and Worton exterior insulation project was delivered amongst a collection of efficiency measures in the Hounslow region.

APPROACH



Soltherm Endurance W+ Silicone was installed to 250 council-owned properties. The solid wall semi-detached units were largely uninsulated and the optimised Soltherm design delivered a post-install U-Value of 0.24W/mK. The economic results of the works were unprecedented, each install generating an average household energy savings in excess of £500 per annum.

Uniquely for a low-rise project, the savings started below DPC. Acknowledging the need to mitigate cold bridges below ground level, Soltherm Deco X Mosaic was designed-in to the system AND importantly warrantied along with the installation of the insulation.

Offering a minimum 25 life (in accordance with ETA 15/0069), Soltherm Deco X Mosaic fuses XPS board with a unique "mosaic-tech" Acrylic render finish. The result is a best in-class system that aligns to the warranty requirements of PAS 2030:2019 and SWIGA.

Alignment to PAS standards was an important consideration throughout this project. As a pre-requisite to tender, all elected parties had to commit to delivering the scheme in strict accordance to PAS 2030: 2019 and PAS 2035 (where applicable). Adopting the most robust of quality standards required, enhanced technical support and monitoring from the Soltherm customer service team. Soltherm provided qualified Retrofit Co-ordinator services throughout the scheme ensuring that every detail and interdependency was duly considered and addressed accordingly. Extensions at roof eaves, below ground insulation and enhanced ventilation were just some of the areas designed specifically to suit the standards.

PROJECT NAME:

WHG-Worple & Worton Estate, Hounslow

SYSTEM(S) INSTALLED:

Endurance W+ Silicone 140mm
ETA 18/0123
Deco X Mosaic to Plinth Level

M²:

17,500

TYPE OF BUILDING:

Social Housing

SUBSTRATE & U VALUE

Solid-wall. 0.24 W/mK

INSTALLER:

Hamiltons

In addition to the PAS and efficiency led design considerations, Hounslow also stipulated some more practical needs. During procurement, there were concerns raised that the external wall insulation was less robust than the previous brick, and, as some future residents may be less aware of perceived frailty of EWI technology, there was concern that mechanical system damage may become prevalent and in-turn reactive system maintenance become excessive. Soltherm alleviated these concerns by specifying Endurance W+ Silicone. Endurance W+ Silicone offers a 79 joules impact resistance. This is 8 times more than the classification Category I threshold (10Kj) in accordance with ETAG004 and is industry leading.

Finally, in another practical twist, planning authorities demanded that the properties resemble the original London stock brick. Although willing to acknowledge the textural change of brick to render, they insisted that the colour remained. Soltherm's colouristic department swiftly matched the brick and a project specific colour was created. Although it was met with mixed reviews from the local public (many envisioned Worple and Worton being Hounslow's answer to Portofino), the authorities were satisfied that visual order had been assumed.

