

## CASE STUDY

# KENNEDY GARDENS BLOCK 2, BILLINGHAM

Residents benefit from new watertight roof



Hundreds of homes have been refurbished as part of a multi-million pound revamp of housing association properties.

Tristar Homes spent £8m on the scheme at Kennedy Gardens in Billingham where they carried out work on 225 properties across the three housing blocks as well as creating 12 new one and two bedroom homes which have been made available for rent.

The development, completed in September 2014, includes the fitting of new windows, new bathrooms and improved living space due to the new balcony extensions.

The roof area before its refurbishment had a U-value of 0.4 W/m<sup>2</sup>K. This existing build up would not have met the requirements of the current building regulations Part L.

The lower roof had been over laid at least twice since its original construction. In all but one core sample, the existing insulation was wet through and therefore it was apparent that 90% of the existing roof build up needed stripping to the original asphalt.

A further inspection was needed when the asphalt was exposed to ascertain the condition and depth of the asphalt. The asphalt

**Project Sector:** Public Sector

**System:** Single Layer Built-up Felt Roofing  
Photovoltaic Energy System

**Products Used:** Mach One System

**Size:** 2500m<sup>2</sup>

was deemed in reasonable condition so the new system could be installed onto the original asphalt.

IKO worked with installing contractors BriggsAmasco to refine the roof specification and recommended IKO's Mach One single layer bituminous membrane system, installed to the recommendations of wind uplift calculations and performing to a 0.18U value as per requirements.

Mach One membranes are a robust, flame-free, single layer roofing system with added fire-retardancy. Mach One can be mechanically fastened, ballasted or bonded with polyurethane adhesive.

A 20 year insurance backed guarantee was issued to cover all materials, design and workmanship covering contractor insolvency.