

Mastic Asphalt Council helps build sustainable communities

Brindley Asphalt Roofing, a member of the **Mastic Asphalt Council (MAC)**, has applied a mastic asphalt system to the balcony areas and flat entrances of Merridale Court in Wolverhampton. **Malcolm Grinstead**, director of the Council, spoke to the roofing contractor to discuss the challenging and demanding project in more detail

Merridale Court is a Wolverhampton-based flat complex originally constructed in the 1950's. Wolverhampton Homes invested £3 million in an external works refurbishment scheme, affecting a total of 157 properties across nine residential blocks. This included works to rejuvenate mastic asphalt on the balcony areas and entrances to the properties.

A challenging and demanding project, Brindley Asphalt Roofing, a member of the Mastic Asphalt Council (MAC), was selected to apply a mastic asphalt system to the balcony areas and flat entrances.

Traditionally consisting of graded limestone aggregate bound together with bitumen, today's mastic asphalt systems are now manufactured using advanced polymer modified formulations to ensure all the performance characteristics of traditional asphalt systems, with the added benefits of increased flexibility, enhanced handling and sustainability.

Seamless and durable

For specifiers and contractors seeking an efficient, cost-effective and simple-to-install way to weatherproof the exposed parts of buildings, including balconies and terraces, mastic asphalt is a proven surfacing material.

Seamless, durable and with exceptional waterproofing characteristics, it can be installed with minimal disruption and downtime, and will

The mastic asphalt system used for the Merridale Court project was IKO Permaphalt – a specially formulated, polymer modified mastic asphalt that provides exceptional long-term durability, increased fatigue resistance, enhanced temperature stability, ease of installation and carbon neutral properties.

Independent low temperature flexibility tests conclude that IKO Permaphalt will withstand ambient temperatures down to -20°C. It is designed to provide an effective barrier to the transmission of liquid water and water vapour for the design life of the substrate on which it is incorporated.



Brindley Asphalt Roofing applied the IKO Permaphalt mastic asphalt system for the Merridale Court project

protect balconies from the elements.

David Watkiss, contracts manager at Brindley Asphalt Roofing, said: "Although the existing balcony areas and flat entrances comprised mastic asphalt at Merridale Court, the client's original intention was to refurbish the areas with a liquid applied roof coating. However, during the course of a number of meetings and consultations with the client and design team about how the project could be carried out safely and without disruption to the residents, the specification was overturned in favour of mastic asphalt.

"Throughout the duration of the refurbishment, the site was live to residents and the walkways were the only access to each individual flat. Careful planning and procedures were in place to ensure the wellbeing of residents and the safe installation of mastic asphalt. It was critical to ensure that the safety of residents was never compromised during the application process. We were engaged on-site for 15 months and a surface area of 1,800m² was protected with mastic asphalt as part of the contract," he continued.

During the project, there was no need for naked flame at roof level. As mastic asphalt is laid in molten form, it is often confused with other types of waterproofing membrane that require naked flame or torch on application. By utilising a flame-free roofing system, the fire risk from a naked flame was eliminated and the refurbishment work was able to be carried out whilst residents carried on as normal.

Mastic asphalt provided a strong, seamless, robust and easily maintainable, long lasting surface covering. Quickly and

easily installed, mastic asphalt allowed rapid application within hours, avoiding extended curing times associated with other materials. It provides exceptional waterproofing, remaining impervious to water, as well as being vermin-proof and rot-proof.

Delivering longer lasting surfaces, and savings in total lifecycle costings, mastic asphalt is capable of outperforming and outlasting comparable waterproofing materials. Highly cost-effective, mastic asphalt offers lower installation costs than many other types of membranes.

Furthermore, the high mineral content of mastic asphalt renders it virtually incombustible, as it fulfils all the external fire resistance required for a roof covering and achieves the highest rating (AA) when tested in accordance with BS 476: Part 3. It has also been tested in accordance with draft European standards prEN 1187-1 and prEN 1187-2. No significant spread of flame was observed, and no flame penetration occurred. Mastic asphalt systems also have Loss Prevention Certification Board (LPCB) accreditation for fire safety.

As a valued contractor heavily involved in the Merridale Court project, Brindley Asphalt Roofing was recently invited by Wates to the Considerate Constructors Awards in London where Wolverhampton Homes received the Gold status for the first time. Both Wates Living Space and Wolverhampton Homes stated that the standard of workmanship and attention to detail on the project were outstanding.

David concluded: "Following the success of the Merridale Court project, Wolverhampton Homes specified mastic asphalt on a further project in Heath Town, Wolverhampton, and nominated and awarded Brindley Asphalt Roofing the contract. The project involves the application of 3,000m² of mastic asphalt on walkways and balconies.

"The project is more complicated than Merridale Court, as we have had to incorporate a vapour control layer, with insulation with the asphalt waterproofing on a live site to residents, as the walkways are over living accommodation." **rci**

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