

PLOT 9: Three on Nine

GRAHAM MITCHELL ARCHITECTS WITH WILLIAM GRAY CONSTRUCTION

Three on Nine successfully marries together a sense of space within a traditional terrace design and maximises the social and community ethos which underpins the forthcoming housing Expo, taking place at Milton of Leys, Inverness, in August this year.

The vision of Aberdeen-based architectural practice Graham Mitchell Architects, the single-block, three-property traditional Highland terrace is being developed by local firm William Gray Construction. Each three-bedroom home will feature elements conducive to sustainable living as well as sticking to a low-tech approach, ensuring both simplicity and practicality – to create a contemporary take on the tradition and style of Highland homes.

With a firm eye on eco-friendly living, the simple and small timber frame structure provides a highly insulated fully 'breathable' construction. The design incorporates the extensive use of mineral wool insulation to minimise the need for a conventional heating system instead calling on renewable energy capabilities in the form of roof-mounted solar panels to ensure effective for water heating. This approach extends through the minimal use of modern, energy guzzling appliances to keep energy consumption down.

With a stunning southerly outlook, the property takes full advantage of its position by facing almost directly south it maximises the sun, natural light and heat in the main living areas. To the north, the homes feature roof lights to allow for the circulation of fresh air and additional daylight. As a result, each home offers clear distinction between its public and private space. The use of large south-facing windows enables natural light to flood into the living room and kitchen however attention to detail ensures that the rooms do not get too hot through the clever installation of manually operated external blinds and insulated shutters internally within the building's outer shell.

In keeping with the demands of modern living and the needs of today's family, each home provides three south-facing bedrooms, shower room, living room, kitchen and dining area as well as maximising all available space. In addition each terraced house benefits from dedicated utility/recycle storage plus a garden shed.

The inclusion of three large openings on the ground floor is not only an interesting design feature, but links the main living areas to the gardens while also effectively trapping heat from the sun. Through the innovative use of polished concrete floor slabs which retain heat and release it throughout the day and night, each home is kept at a constant temperature.

Outside the property, there is a focus on encouraging social interaction between neighbours. The lack of fencing between gardens combined with very little ground cutting, will produce natural drops to distinguish between each property's boundaries. The use of locally sourced Caithness stone creates a step which signifies each properties space but also suits the harder more urban side of the terrace. It

is hoped that the design approach will encourage interaction and informational gatherings to help build and maintain a strong sense of community between neighbours.

The family garden offers a timber terrace in keeping with elements of the internal finishes and features soft landscaping and a wild growing area will encourage biodiversity whilst a herb and vegetable garden and composting facility will allow homeowners to enhance their self sufficiency and sustainable commitment.

The external finish of the terrace strives to emphasise lightweight and rural in terms of its colour in relation to its surrounding landscape. It is protected by a 'skin' of bark and timber which allows for extensive use of a single natural material.

The house will be open to the public for viewing at Scotland's Housing Expo which will take place at Milton of Leys in Inverness throughout August. The Expo will provide a vision for the next generation of Scottish housing and is based on an established model found in Finland and mainland Europe. It is set to put Scotland firmly on the map as an exemplar of sustainable living.

The Expo houses and their contents will form a platform for showcasing the wealth of Highland and Scottish design talent, including interior and product design. The initiative also provides a 'test bed' for construction and technological innovation, which will inform Scottish house building in the future. The houses will inspire developers to learn new skills and source fresh ideas to incorporate into future designs, while demonstrating how new building standards can be met on energy efficiency and carbon reduction.