

SDG

STRONGER
TOGETHER

IDA ADVANCE OFFICE BUILDING DUNDALK

CLIENT

IDA IRELAND

MAIN CONTRACTOR

FELIX O'HARE

DATE

OCTOBER 2018

ARCHITECT

VAN DIJK ARCHITECTS

STRUCTURAL & CIVIL ENGINEER

WATERMAN MOYLAN

PROJECT SUMMARY

SDG we're proud to be involved with one of IDA Ireland's newest office developments. Designed to fuel the ever-growing need for Grade A office space in key strategic locations in Ireland, this impressive 3,232m² two-story office will greatly assist local companies seeking high quality office space to grow their operations. Designed to achieve LEED CS (Core & Shell) accreditation, the IDA Advance Office will offer tenants the most efficient, cost-effective, and environmentally sound building possible. SDG were happy to play a role in the thermal isolation of concrete connections, which worked to assist in the accreditation of such a high building standard.

THE ISSUE/CHALLENGE

As the building featured an external balcony, the designers considered the potential for cold bridging through the concrete slab. If left as a single monolithic concrete slab, the exterior balcony would work as a bridge, acting as a heat sink allowing for internal warmth to be drawn outside. If left untreated, this temperature differential can cause not just heat-loss, but inner condensation.

WHAT WE PROVIDED/SOLUTION

Felix O'Hare asked SDG to assist with the design and supply of thermal breaks to ensure the cantilevered balcony slab would be insulated from the main slab to prevent thermal bridging.

Working closely with our partner Max Frank UK/Germany, we had calculations produced for engineers' approval. Once approved, lay out drawings were produced, and the Egco-box connectors were sent for production in Max Franks Egco-box production unit in Germany. Egco-box thermal breaks are BBA approved and come with free design and on-site technical support.

THE RESULTS

Working closely with the Max Frank UK team, we arranged for on time delivery to site. The bespoke Egco-box units were installed as per manufacturers guidelines and layout drawings. Since installation, the units are working as per design to isolate the balcony from the main slab, allowing for a complete reduction in thermal bridging thanks to the thick mineral wool isolation block. Egco-box also works to carry the weight of the cantilever slab, offering the ultimate level of structural safety. Should you have a requirement for the Egco-box system, reach out to our Technical Team for assistance.

