



Case Study

BBC Scotland, Pacific Quay

HCP

Trench Heating

Over a kilometre of Trench Heating installed at BBC Scotland

HCP, a wholly-owned division of SAS International, has won another project with the BBC. Following its successful involvement on the BBC Media Village project at White City in London, over 1,000m of trench heating has been installed in the new BBC Scotland headquarters building. This stunning new 34,000m² landmark building at Pacific Quay, Glasgow, on the south bank of the river Clyde, will be fully operational this year.

Keppie Design was employed by Bovis Lend Lease as implementation architects for the delivery of the building, working in conjunction with the BBC's Executive Architects, David Chipperfield Architects. Arup & Partners were the M&E Consultants.

The six story development had trench heating specified around the entire perimeter of the building. It was chosen to help reduce the cold down drafts and condensation typically associated with buildings with glazed elevations. This form of heating also offers energy saving features and cost efficiencies through the combination of lower water volumes and operating pressures. This benefit is becoming more important as designers, consultants and clients aim to meet the requirements for low energy use set out in the latest amendments to the Building Regulations.

Trench heating systems typically involve a convector recessed into steel casing within the floor, with a roll-up covering grille.

These systems therefore provide an effective heat source where wall space is limited, and also avoid the hot and cold spots associated with traditional radiator systems. Whatever the space restriction or output requirement, HCP can design a system to suit.

In this project, given the combination of a deep pressurised floor void and perimeter cladding brackets, HCP designed and manufactured special floor brackets to support the trench heating system and the active loads demanded by the 24 hour occupied space.

With the aim of inspiring the public and drawing audiences to its heart, BBC Scotland's architectural brief was to design a dynamic broadcasting HQ fit for the 21st Century. Operating around the clock, it aims to be light and airy, with welcoming social spaces. The design creates a simple open and transparent six-storey glass structure. Internally, a tiered sequence of platforms and terraces, created over the central studios, appear as a grand staircase within the atrium.

SAS International also supplied extensive architectural metalwork solutions including bespoke System 600 acoustic rafts for the striking atrium ceiling, the reception ceiling and main office areas, along with wall panelling and balustrades.

Project Name: BBC Scotland, Pacific Quay

M&E Contractor: Balfour Kilpatrick Limited

M&E Consultant : ARUP

Architect: David Chipperfield Ltd

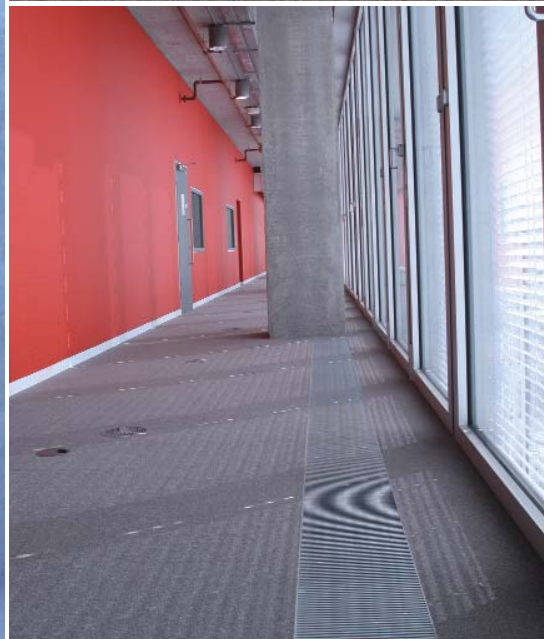
System Type: Trench Heating

Special Requirements: Brackets to raise casing due to deep floor void

Length: 1,000+ linear meters

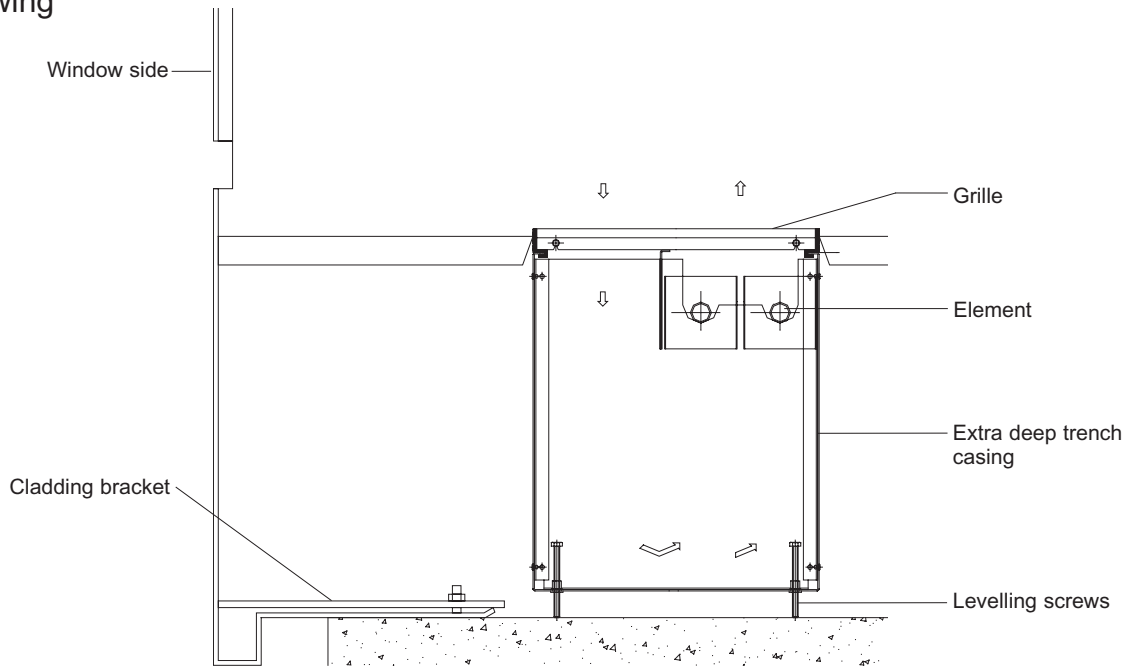
Location: Glasgow

Completion Year: 2007

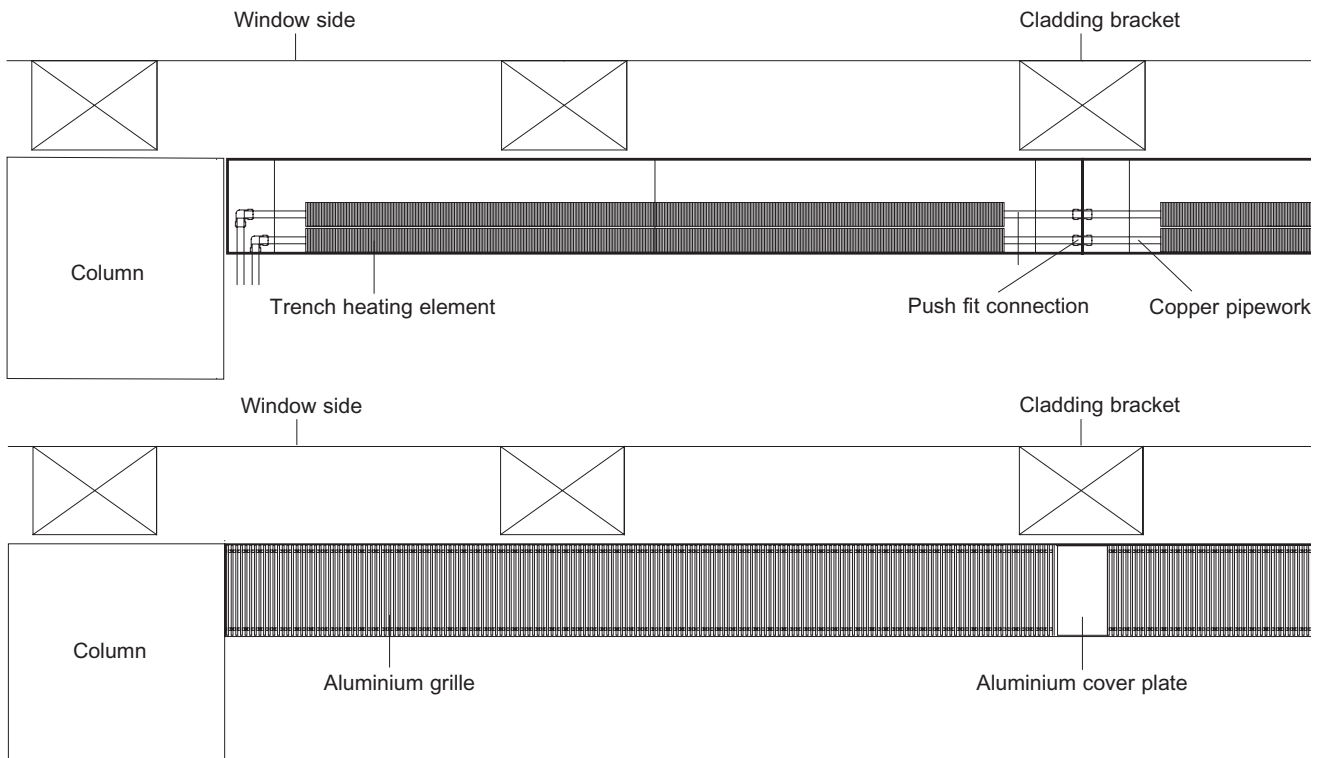


Technical Information:

Section drawing



Plan view - Trench casing with and without aluminium grille



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