

CASE STUDY
TESCO BANCHORY







With thanks to Manson Architects for photography.

Timber technologies

Most large supermarkets use a steel skeleton for their internal structure. Instead, in this case a glue-laminated (Glulam) structural frame was used, made up of massive spruce timber beams and joists to support the walls and roof. These were prefabricated and cut to size offsite, and then joined together as an assembly kit using steel bracket connectors.

The building has a timber canopy in a raked and fluted shape which makes the store look inviting. The external walls are pre-fabricated timber cassette panels, finished externally with profiled Siberian larch cladding. Timber-bladed larch 'brise soleil' (permanent exterior bladed sunscreens) also add functional decoration to the exterior of the building.

Special timber-related features

By using timber, the carbon footprint of the building frame is approximately 13% of a normally constructed steel framed store, meeting all requirements more economically, ecologically and efficiently.

The timber construction also enabled a very short installation time of only a few weeks. Due to the low weight of timber it was also possible to carry out much of the pre-assembly works on the ground, then lift them into place.

Other 'eco-initiatives' were used, such as, skylights to maximise natural illumination of the store, and rainwater harvesting for use within the building.

All timber used in the Glulam is Programme for the Endorsement of Forest Certification Schemes (PEFC) certified, and purchased from sustainable managed forests.

CASE STUDY

TESCO BANCHORY

Name of building

Tesco Banchory

Date completed

2010

Building type

Retail superstore

Location

Hill of Banchory, Banchory, Aberdeenshire

Architect

Manson Architects

Client

Tesco Stores Ltd

Main contractor / timber supplier

Barr Construction

Wiehag

Background to building

This 4,500 sqm bespoke superstore on the eastern edge of Banchory was designed to reflect the wooded setting of the area using timber and a range of green materials for its main construction.

Due to the rural location of the building, sustainability was a key factor in its design, and natural materials from sustainable sources were used as much as possible to minimise its impact on Banchory's natural surrounding. Energy-efficient measures were also used to reduce the building's carbon footprint both during and after construction.

Material Considerations

A Natural Factory

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