



# Green Roof

Horbury School, Wakefield / Watershed (Roofing) Ltd, Bradford



**Project:**

*Horbury School, Wakefield*

**Area:**

*1,500m<sup>2</sup>*

**Completion Date:**

*February 2009*

**System:**

*SureWeld TPO, Extensive Sedum Roof, Monarfloor Tranquilt*

**Client:**

*Wakefield Metropolitan District Council*

**Specifier:**

*NPS Group*

**Main contractor:**

*Miller Construction Ltd, Normanton*

**Contractor:**

*Watershed (Roofing) Ltd, Bradford*

**Background**

Designed by NPS North East property consultants, and built by Miller Construction, Horbury School is a steel-frame building with metal stud and plasterboard internal walls, and with heavyweight concrete roofs and floors to help reduce overheating. The design provides good levels of acoustic separation and reduces fabric heat losses to 10% lower than Building Regulation requirements.

**Challenge**

The new school project was phased over three years, with demolition and rebuilding on the 11,500m<sup>2</sup> site continuing while the school remained open. The overall brief was to design a new school based on the then current 'Building Schools for the Future' layouts, which demanded the achievement of a 'very good' BREEAM sustainability rating.

**Solution**

To limit noise transmission, IMA contractor Watershed (Roofing) Ltd installed Icopal's Monarfloor Tranquilt system under the floor screed on the ground and first floors, and under the canteen and meeting areas within the central atrium, as the system exceeds the requirements of Part E and Building Bulletin 93 regulations in terms of impact and airborne sound insulation. In addition, the Watershed team installed an extensive Icopal sedum roof system, incorporating a Total Torch and Rootbar capsheet system, on the roofs of the science and art and design technology classrooms.

On other roof areas the Watershed team installed Icopal's SureWeld TPO, a fully recyclable advanced Thermoplastic Polyolefin single-ply membrane that is PVC-free and specially formulated for long-term exposure, without the use of either polymeric or liquid plasticisers.

Icopal's roofing produces, and Watershed's expertise, helped the school achieve a 'very good' BREEAM rating. In addition, despite a tight schedule hampered by bad weather, both products and installation team performed well and the end result is excellent.