

WAITROSE DISTRIBUTION CENTRE, LANCASHIRE
C A GROUP LIMITED



Waitrose is the food retail arm of the John Lewis Partnership and together, through their Corporate Social Responsibility (CSR) strategies, they have set a number of extremely strong objectives to minimise the impact of their actions on the environment.

With regard to their future construction needs they intend to deliver tough, meaningful and demonstrable compliance which will ensure that, not only will they reduce the CO₂ emissions from the construction of their buildings, but also from the operation of those buildings throughout their lives.

When the company embarked on a new distribution facility in the North West it had to be delivered to the highest standards possible. Integral to this was achieving an extremely high EPC rating and consequently air leakage had to be low. A target of 1m³/hr/m² @50Pa was set and the design of the building focused on delivering this standard.

Air leakage has been widely identified as the major source of lost heat in buildings and chilled air in chill stores, resulting in higher running costs and costly CO₂ emissions. With the Government's commitment to a 20% reduction in CO₂ emissions by 2020, the issue of airtightness – the resistance of the building envelope to inward or outward air leakage – in commercial developments has become a priority.

This is a priority which CA Group has taken very seriously for over 10 years. The company has had considerable success assisting the delivery of airtightness ratings of between 1.0 and 2.0 m³/hr/m², which is well below the Part L minimum requirement of 10.0m³/hr/m².



Evander who developed the building on behalf of Waitrose elected to specify the CA Twin-Therm® Chronus solution to meet these standards. The distribution centre is subdivided to deliver an ambient storage area and a chill store of a considerable size. CA Group rose to the challenge and the resulting building envelope, when combined with the quality installation carried out by Yorkshire Sheeting & Insulation Services, achieved record airtightness levels for Waitrose of 0.99m³/hr/m²@50Pa.

Twin-Therm® built up system supplied by CA Building Products is the natural choice for anybody looking for low air leakage and extremely efficient thermal performance. The liner panel acts as a proven air barrier whilst at the same time allowing the building to be closed in the shortest possible timeframe, enabling internal works to begin earlier in the programme.

Yorkshire Sheeting was able to insulate and install the external profiles without interfering with any other sub-contractors on the site. The architect was able to incorporate the external profiles in a number of orientations which broke up the elevation, allowing depth and variation of colour. The use of glass fibre insulation eliminated any fire risk – glass fibre has been proven not to add to the fire load – and at the same time removed any issues relating to building disposal costs at the end of the building's useful life.

One further significant factor is that none of the 77,000 fasteners contained in the roof penetrated the building from the outside to the inside, which eliminated the risk of leaks, leaving the inside of the building dry.

CA Building Products Twin-Therm® Chronus built up roof and wall cladding system is highly flexible, enabling the cladding to accommodate variances in steelwork tolerances which cannot be achieved with a rigid solution. The latest result demonstrates the efficiency of the systems which have been developed by CA and upon which the company continues to improve.

Additional benefits of CA Group's Twin-Therm® system:

- Solution can be applied to 99.9% of all retail, distribution and industrial properties.
- Thermally efficient; consistently delivering EPC (A) rated buildings.
- Complies with the Montreal Protocol and the recent UNEP recommendations relating to insulation choice.
- Cost effective to install and decommission – no disposal costs

- Comes with a 25-year guarantee
- Incorporates Colorcoat HPS200 Ultra® roof and walls resulting in a Confidex®
- Guarantee of up to 40 years.

Project details:

Client: Waitrose
Architect: AJA Architects LLP
Main Contractor: Winvic Construction
Sub Contractor: Yorkshire Sheeting & Insulation Services
Materials Installed: CA Building Products – Twin-Therm® Chronus in Colorcoat HPS200 Ultra® Goosewing Grey Roof and Merlin Grey, Walls in Albatross.
Materials Installed: CA Building Products – Twin-Therm® Chronus in Colorcoat HPS200 Ultra®
Confidex Sustain project



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