

Wine and Spirit Store, Bury St Edmunds

Client's Brief

A building of approximately 4000m² superficial area was required to provide for the centralised storage and distribution of wines and spirits close to the client's main offices and brewery complex in Bury St Edmunds to replace a number of existing cellars dispersed about East Anglia. The site selected was a southward facing slope of largely disused allotments adjacent to their main offices. The size and layout of the storage space was determined by independent management consultants after an assessment of the client's distribution pattern and predicted growth rate.

Siting and Planning

The client's need for possible future expansion and the River Authority's requirement that no part of the building was within the 1968 flood plane effectively restricted the building to the N.E. corner of the site which necessitated considerable earth moving and retaining walls. The Planning Authority was concerned with the impact of such a large building on the adjacent housing, with which it would be in close proximity, and the building's relationship to the backcloth of traditional buildings on the skyline when seen from the new relief road to the south. To minimize its effect on these, the lowest possible ground floor level was chosen, an extensive perimeter planting scheme was agreed and a muted colour scheme of dark brown cladding and framing adopted.

Materials and Construction

The structure comprises an exposed bolted steel frame on a 9m x 15m grid with 457 x 191 x 74kg columns externally and 203 x 203 x 46kg columns internally, with

proprietary cold rolled galvanised steel lattice "V" beams spanning 15m at 4.5m centres with a clear internal height of 9.7m. The frame is restrained by exposed diagonal tubular steel braces in conjunction with a stressed skin diaphragm metal roof deck. A 200mm thick power floated epoxy paint finished reinforced concrete ground floor slab with thickenings under column bases was designed to support floor loadings of up to 20kN/m² on a soft putty chalk subsoil. The external cladding is a double skin of profiled steel sheet, pvc coated externally, and galvanised internally with a central layer of fibreglass quilt, spanning 5m vertically to a mid-height cruciform beam designed to withstand wind loads. A matching pvc coated curtain walling system is used for the two-storey offices. The roof comprises a galvanised steel deck with rigid polyurethane foam insulation and bituminous felt roof finish with chippings. Heating and ventilation is by means of high level oil-fired heaters and fresh air intakes with localised roof extractors and, with the exception of the office area, is artificially lit throughout by means of high bay and fluorescent light fittings. Fire protection is provided by smoke vents and fire compartment doors activated by gas and heat detectors and security by means of micro-wave light beams, vibrator units located on a 2.4m high freestanding internal perimeter back-up wall and external flood lighting.

ARCHITECTS

Lyster Grillet & Harding

**STRUCTURAL ENGINEERS
Conder (Southern) Ltd**

**STEELWORK CONTRACTOR
Conder (Southern) Ltd**

Judges Comments

Large warehouses on backland sites are often crude eyesores. This building is outstanding with sophisticated and simple steel work. Its excellent proportions and subtle colouring reduce its apparent bulk and enhance its setting. That this is achieved solely by the exposed steel frame and steel cladding in a building virtually without windows is the more remarkable.

