

## Case study

# Ysgol-y-Gogarth Special Education Needs School, Llandudno, Conwy

Thistle plaster helps to deliver thermal mass performance, alleviating overheating in summer months

### The challenge

- To improve the performance of the building's inherent thermal mass
- To use a product that provided a durable finish for a demanding environment



### Project details

Ysgol-y-Gogarth is a day and residential Special Educational Needs School catering for approximately 195 pupils between the ages of 3 and 19.

### The solution

Two-coat plaster system - Thistle HardWall undercoat plaster and Thistle MultiFinish finish coat plaster to internal blockwork walls.

### Reasons for specification

Solid plastering was shown to lead to a better thermal mass performance than drylining, critical to the building's south west elevation to prevent overheating during summer months.

Impact resistance and durability were key requirements of the project, along with improved maintenance cycles. The robustness of two-coat plaster helps to meet this requirement by preventing the need for regular repair work.

### Additional contractor benefits

- Using a bagged plaster product is much easier than moving sand and cement to an application area
- Finishing coat can be applied on set undercoat and before it is fully dry, saving time and maximising productivity on site
- There is no danger from cracks appearing days or weeks later due to the shrinkage of the plaster

### Main Contractor

Willmott Dixon

### Architect

Atkins

### Sub Contractor

Ombler Williams

### Client

Conwy County Borough Council

### Products specified

Two-coat plaster system:  
Thistle HardWall undercoat plaster  
Thistle MultiFinish finish plaster

"Superior thermal mass was required on the south west facing classrooms to avoid them getting too hot during the summer months. Thermal modelling was undertaken and showed that the addition of a two-coat plaster system led to a better performance than what a standard solution would achieve, alleviating overheating in the warm weather. This, combined with the high quality and durability provided by the solution, made it perfect for the job."

Michael Bool, Atkins Architects

"The British Gypsum two-coat plaster system was a joy to work with as it was so quick and easy to apply. As this was a large project, with many different rooms to plaster, it was important that we didn't have a lot of unnecessary building materials and equipment on site. Thistle HardWall and MultiFinish was so easy to mix on site, and the speedy drying times really helped us keep within our timescales."

David Ombler, owner of Ombler Williams Ltd