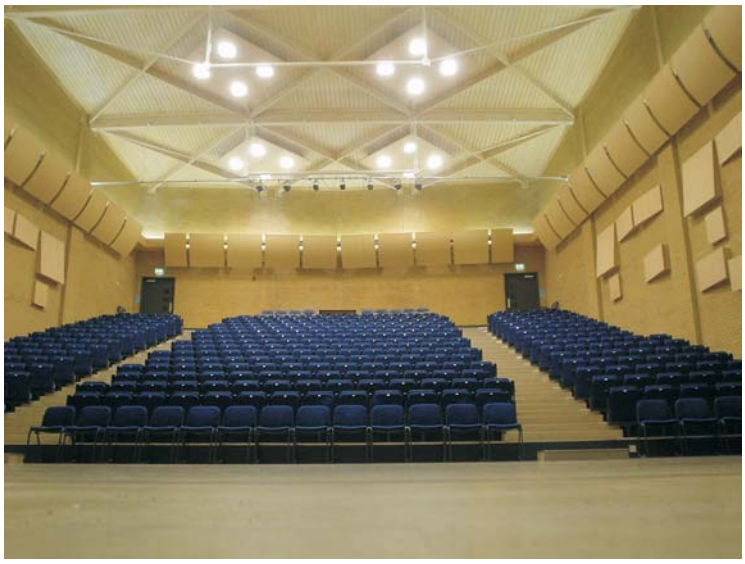
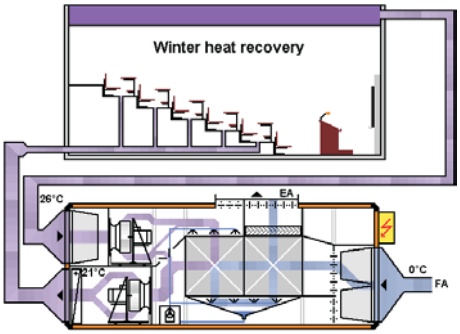
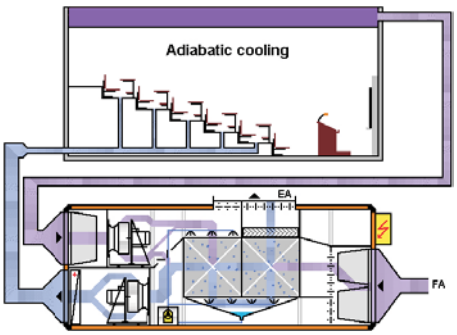
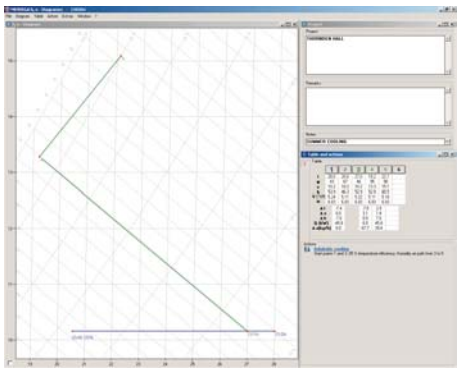
MENERGA orchestrate low energy solution for new 400 seater concert hall Thornden School, Chandlers Ford









The brand new 400-seater concert hall at Thornden School in Chandler's Ford was opened in 2003.

The project to build improved facilities for the performing arts at the specialist status school was designed by Hampshire County Council's award winning architects and building services engineers.

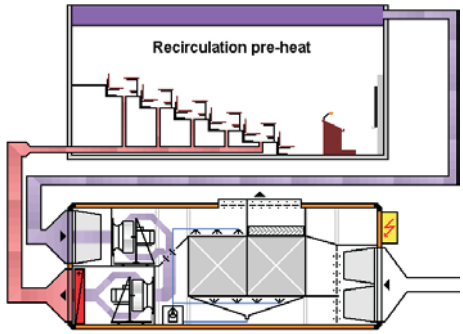
Notable features include a stage large enough to accommodate a full orchestra. A 12m high ceiling and specialist acoustic features in the main auditorium provide an excellent environment for musical performances.

The hall is conditioned by a MENERGA Adsolair air conditioning unit operating in conjunction with a displacement ventilation system. The total supply air volume is 5.2m³/s.

Two stage heat recovery achieves a temperature efficiency of up to 80% in winter thereby minimising the ventilation heating requirement. A recirculation heating cycle rapidly brings the hall up to temperature prior to a performance. Under floor heating warms the stage area during rehearsals when there are only a small number of people present.

Low energy solvent direct coupled free running ventilator wheels with frequency controlled motors reduce fan motor power consumption below 1W per l/s air volume.

In summer, when free cooling is no longer available, the indirect adiabatic cooling process cools the supply air by up to 10°C. No chiller, external condensing unit or refrigerants are required.



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