The New Brewhouse, Malta: Environmental Control through Natural Ventilation, Daylighting and Shading

Alberto Miceli Farrugia
Greta Caruana Smith
Architecture Project Ltd., Malta

Charles Yousif
Institute for Sustainable Energy
University of Malta, Malta

Maria Cristobal
School of Industrial Engineering
University of Valladolid, Spain

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- Design approach for a new brewhouse and office building
- Effectiveness of a buoyancy-driven natural ventilation system
- Implications of passive environmental control measures in an office space
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Simulation predicts an average of 11.4 ACH in the Lower Brewhall, reducing the temperature by 10.7 °C and an average of 7.4 ACH in the Upper Brewhall, reducing the internal temperature by 8.5 °C.
Compared to typical construction, the cooling load is predicted to be reduced by 36% with night ventilation and the heating load by 44%. This results in an overall potential reduction of 24%.