



GASTIGHT DOORS

A Waste Management Project

Westmoor Engineering were approached by a waste recycling organisation in need of a gastight door solution. Westmoor willingly obliged, designing, testing and manufacturing the final product. Jack McCusker, Project Engineer, talks through how Westmoor successfully completed the project.

What was the issue the client was facing?

The client strives to prevent odours affecting the surrounding residences. Their existing doors were not performing as required, there were issues with sufficient sealing under pressure. This was potentially costing the company money and could contribute to impacting on the local surroundings

What was Westmoor's approach?

We firstly had to determine the working pressures and the substances the door would be subjected to. We then customised an existing marine design to suit these requirements in a cost-effective way. To verify the design we used FE analysis to optimise strength, we then performed physical tests witnessed by the customer

Were there any technically difficult challenges to overcome?

Although the gas pressure was relatively low, it was required to be held for 8 hours. This meant sealing configuration had to be very precise and 100% gas-tight



The Thornton Waste Recovery Park, the UK's first fully enclosed waste treatment facility



The door under pneumatic test in Westmoor Engineering's manufacturing facility

How has the product benefited the project?

The solution provided offered the client a cost effective way to prevent potential gas leakage, therefore preventing unpleasant odours reaching the nearby residences

What did Westmoor learn from undertaking the project?

Our knowledge of sealing for marine environments can be easily transferred to civil applications. Westmoor's standard product range can be straightforwardly customised to provide a solution for a variety of applications

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Westmoor Engineering has been manufacturing doors and hatches since 1898, and currently operates from its Cramlington facility. Westmoor is part of Renown Group Ltd.

To find out more visit:

www.westmoorengineering.co.uk

