

Tradical[®] Hemcrete[®]

Air Permeability Tests

Hemcrete[®] is an insulation material which can be cast or sprayed to create a monolithic walling system. There are no cavities within a Hemcrete[®] construction and no requirements for membranes other than in roof constructions. As such Hemcrete[®] buildings are inherently air tight and the simplicity of construction will mean they remain that way whereas many other building methods have been shown to lose air tightness over a small number of years.

It is the interface between the building elements where there is the greatest opportunity for air leakage to occur. However service penetrations, window/door junctions and wall to roof junctions can be simply detailed to ensure a low level of air permeability. As ever construction needs to be managed carefully on site to ensure contractors install correctly to the recommended details. Lime Technology can help with specifying systems to deliver low air permeability at these areas of potential vulnerability.

A number of Hemcrete[®] buildings have now been tested for air permeability. All these tests have been carried out in accordance with the requirements of Part L of Building Regulations and the Code for Sustainable Homes and are measured in cubic metres per square metre of wall per hour at 50pa.

A well specified and constructed Hemcrete[®] house will typically achieve an air permeability value of less than 2.5.

Examples of Hemcrete[®] buildings tested recently:

Project	Approximate area	Air permeability test achieved
Wine Society Warehouse 4	2500m ²	3.5
Adnams Brewery Warehouse	4500m ²	3.1
Lime Technology's Office	250m ²	2.3
Crawford Private House	150m ²	1.5

For more information on specifying Hemcrete[®] for thermally efficient, high code level buildings please contact our technical team below.