Please find results for permeability of 10mm Sempatap sample.

Permeability, etc. see attached for definitions

WET CUP TEST	Thickmess	Permeance of sample	Permeability	SD	DRF
5 samples	mm	Kg/s.m2.Pa	Kg/s.m.Pa		
Sempatap	10	3.88E-09	3.88E-07	0.05	4.97

Again thanks for the sample materials.

Kind Regards

Paul

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Water Vapour Permeance

The density of water vapour flow rate divided by the water vapour pressure difference between the two specimen faces.

The mass change rate is G (kg/s) calculated from successive weighings of the specimens.

The density of water vapour flow rate, g, is given by:

$g=G/A$ $\quad kg/sm^2$

where A is the exposed area of the test specimen, in m^2.

The water vapour permeance, W, is given by :

$$W=\frac{G}{A\Delta p_v} \quad kg/sm^2Pa$$

The value of the vapour pressure gradient Δp_V is calculated from the mean of the measured temperature and relative humidity over the course of the test on each side of the sample.

Water Vapour Permeability

The product of the water vapour permeance and the thickness (d m) of a homogeneous specimen.

Water vapour diffusion resistance factor (DRF) or μ-value

The μ-value represents the ratio of the diffusion coefficients of water vapour in air and in the building material.

SD-value or vapour diffusion thickness

The SD-value or vapour diffusion thickness expresses the diffusion resistance of a layer. For a material layer with diffusion resistance factor μ and thickness `d(m)`, the product `μ*d` gives the thickness which a stagnant air layer would need in order to have the same diffusion resistance.

Note

The Permeance and the SD-value relate to the performance of the sample material with thickness d metres.

The Permeability and the DRF relate to the performance of the sample material per metre thickness.