HydroFlam VapourBlock

Fire retardant, airtight, reinforcing and moisture-resistant construction board with integrated vapour barrier

HydroFlam VapourBlock is HydroFlam construction board with an industrially applied, transparent vapour barrier on one side. The VapourBlock vapour barrier has a constant high μ value of 185 (12mm) over the whole surface of the board. This is in contrast to traditional wooden board materials for which the μ value is significantly lower and can vary considerably. The combination with a TopFinish surface ensures that the board is extremely airtight (< 0.001 $m^3/m^2/h/Pa$ at 50Pa-15mm). It is important to always seal all joints and cracks with suitable airtight tape. HydroFlam VapourBlock is suitable for applications in service class 2 (limited temperature and atmospheric humidity) and biological hazard classes 1 and 2 of EN Standard 335-3.

Applications

- Walls
- Floors

Characteristics

- Product class P5
- Structural applications
- Fire retardant B-s2,d0
- Moisture resistant
- Lacquered
- Vapour retardant
- TopFinish
- Airtight
- Tongue-and-groove joints (optional)

UNILIN

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Applications

HydroFlam VapourBlock is an ideal solution for applications in timber-frame construction and in low-energy passive house building. Using HydroFlam VapourBlock on the inside of a building (and vapour-permeable wood fibreboard such as FiberTech Top on the outside) offers the advantage of combining an air barrier, vapour barrier and structural bracing combined in a single layer of board.

HydroFlam VapourBlock is suitable for use as a structural board in applications where low reactivity to fire and flame spread are important (roofs, walls, stairwells, exit routes, lift shafts, corridors etc.) and where a higher resistance to fire is required (fire doors, fire walls etc.). Use the recommended tools when sawing, milling or drilling HydroFlam boards. Fire-retardant products may cause deposits on tools and shorten service life. Consult the UNILIN technical manual with detailed instructions for use and characteristic metrics at www.unilinpanels.com.

Technical specifications

General characteristics + Standard	Unit	Average values	
Thickness EN 324-1 mm	mm	12	
Moisture level EN 322	%	6-10	
Airtightness at 50 Pa EN 13829	$m^3/m^2/h/Pa$	<0,001	
Thermal insulation value EN 13986	W/mK	0,144	
Sound absorption coefficient EN 13986		250-500 Hz: 0,10	1000-2000 Hz: 0,25
Atmospheric sound insulation EN 13986	dB	27,4 (18mm)	
Water vapour permeability μ EN 13986 (dry cup)		185	
Reaction to fire class EN 13501-1		B-s2,d0	
Technical characteristics + Standard		**5/95 percentile values**	
Bending strength EN 310	N/mm^2	18	
Internal bond EN 319	N/mm^2	0,45	
Bending stiffness EN 310	N/mm^2	2550	
Swelling/24h EN 317	%	11	
Internal bond after cyclic test EN 321-1 option 1	N/mm^2	0,25	
Swelling after cyclic test EN 321-1 option 1	%	12	

HydroFlam VapourBlock comes under formaldehyde emission class E1 and meets the general requirements as described in Table 1 of EN Standard 312.

Available dimensions and thicknesses

HydroFlam VapourBlock boards are available from stock. Consult the complete UNILIN Panels stock range at www.unilinpanels.com.

For our technical capabilities on custom thicknesses and dimensions as well as minimum order requirements, please contact our sales team or email info.panels@unilin.com.

Certificates

UNILIN Division Panels is actively committed to sustainable forest management. HydroFlam VapourBlock is available on demand with PEFC and FSC® labelling.

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