


X-FOAM[®] HBT

EXTRUDED POLYSTYRENE PANEL (XPS) [WITHOUT HCFC - WITHOUT HFC]

CARACTERISTICS	STANDARD	UNIT	VALUES													
SIZE																
Thickness	EN 823	mm	30 - 300													
Thickness tolerance class (T1)																
Thickness < 50 mm	EN 823	mm	-2 /+2													
Thickness from 50 to 120 mm	EN 13164		-2 /+3													
Thickness > 120 mm			-2/+6													
Length	EN 822	mm	1250													
Width	EN 822	mm	600													
TYPE FINISH																
L - edges 	Panel with skin surface															
THERMAL CONDUCTIVITY AND THERMAL RESISTANCE																
Declared thermal conductivity																
Thickness 30 mm	EN 13164 EN 12667	W/mK	0,032													
Thickness 40 mm			0,033													
Thickness from 50 mm to 60 mm			0,034													
Thickness from 80 mm to 100 mm			0,035													
Thickness 120 mm			0,036													
Thickness from 140 mm to 180 mm			0,034													
Thickness from 200 mm to 300 mm			0,035													
Thermal resistance (EN 13164)																
Thickness (mm):	30	40	50	60	80	100	120	140	160	180	200	220	240	260	280	300
Thermal resistance (m ² K/W):	0,90	1,20	1,45	1,75	2,25	2,85	3,30	4,15	4,70	5,25	5,75	6,30	6,85	7,45	8,00	8,55
COMPRESSIVE STRESS AT 10% DEFORMATION - σ_{10}																
Thickness from 30 mm to 300 mm	EN 826	kPa	≥ 300													
COMPRESSIVE STRESS AT 2% DEFORMATION AFTER 50 YEARS																
Thickness from 30 mm to 300 mm	EN 1606	kPa	120													
DIMENSIONAL STABILITY AT SPECIFIED TEMPERATURE AND HUMIDITY CONDITIONS																
Condition test: (48±1) hours, (70±2)°C and (90± 5)% U.R.																
Changes in thickness, length and width	EN 1604	%	≤ 5													
DEFORMATION BEHAVIOR																
Test condition: 70°C, 168 hours, 40 kPa	EN 1605	%	≤ 5													
LONG TERM WATER ABSORPTION BY TOTAL IMMERSION (28 DAYS)																
Thickness from 30 mm to 300 mm	EN 12087	Vol. %	≤ 0,7													
WATER ABSORPTION BY DIFFUSION (28 DAYS)																
Thickness from 30 mm to 50 mm	EN 12088	Vol. %	≤ 5													
Thickness from 60 mm to 300 mm			≤ 3													
WATER VAPOUR DIFFUSION RESISTANCE FACTOR (μ)																
Thickness 30 mm	EN 12086		150													
Thickness from 40 mm to 300 mm			100													
FREEZE - THAW RESISTANCE																
Thickness from 30 mm to 300 mm	EN 12091	Vol. %	≤ 1													
REACTION TO FIRE																
Reaction to fire	EN 13501-1	Euroclass	E													
TEMPERATURE LIMIT USE																
Temperature limit use		°C	+ 75													