

CE marking for wood-based panels

Selecting the correct panel for end-use



Service classes		Area of application – technical classes		
		non-structural	structural	heavy duty load-bearing
Class 1 internal use dry conditions	Particle boards EN 312	P1 + P2	P4	P6
	Plywood EN 636	EN 636-1/G	EN 636-1/S	
	OSB EN 300	OSB/1	OSB/2	
	Solid wood panels (SWP) EN 13353	SWP/1 NS	SWP/1 S	
	Laminated veneer lumber (LVL) EN 14279	LVL/1 NS	LVL/1 S	
	MDF EN 622-5	MDF	MDF.LA	
	Softboards (SB) EN 622-4	SB	SB.LS	
	Medium boards (MB) EN 622-3	MBL + MBH	MBH.LA1	MBH.LA2
	Hardboards (HB) EN 622-2	HB	HB.LA	
Class 2 internal use humid conditions	Particle boards EN 312	P3	P5	P7
	Plywood EN 636	EN 636-2/G	EN 636-2/S	
	OSB EN 300		OSB/3	OSB/4
	Solid wood panels (SWP) EN 13353	SWP/2 NS	SWP/2 S	
	Laminated veneer lumber (LVL) EN 14279	LVL/2 NS	LVL/2 S	
	MDF EN 622-5	MDF.H	MDF.HLS	
	Softboards (SB) EN 622-4	SB.H	SB.HLS	
	Medium boards (MB) EN 622-3	MBL.H + MBH.H	MBH.HLS1	MBH.HLS2
	Hardboards (HB) EN 622-2	HB.H	HB.HLA1	HB.HLA.2
Class 3 exterior conditions	Cement-bonded particleboard EN 634-2		Class 1+2	
	Plywood EN 636	DIN EN 636-3/G	DIN EN 636-3/S	
	Solid wood panels (SWP) EN 13353	SWP/3 NS	SWP/3 S	
	Laminated veneer lumber (LVL) EN 14279	LVL/3 NS	LVL/3 S	
	Softboards (SB) EN 622-4	SB.E		
	Medium boards (MB) EN 622-3	MBL.E + MBH.E		
	Hardboards (HB) EN 622-2	HB.E		

Notes – see reverse

Service classes

The system of service classes is important for the structural engineer and architect in assigning strength values and calculating strain.

The service classes describe the climatic environment of a building or part of a building at its point of installation during its entire period of service. The (maximum) equilibrium moisture content – EMC – to which the wood will adjust at its point of installation, can be determined from the (upper) climatic levels given for the service classes.

Service class 1: For conditions corresponding to service class 1 of prEN 1995-1-1 which is characterised by a moisture content in the material corresponding to a temperature of 20°C and a relative humidity of the surrounding air only exceeding 65% for a few weeks per year.

Service class 2: For conditions corresponding to service class 2 of prEN 1995-1-1 which is characterized by a moisture content in the material at a temperature of 20°C and a relative humidity of the surrounding air only exceeding 85% for a few weeks per year.

Service class 3: For conditions corresponding to service class 3 of prEN 1995-1-1 which is characterised by climatic conditions leading to higher moisture contents than in service class 2.

Class 3 boards can also be used in classes 2 and 1. OSB3, LVL1 or cement-bonded particleboards for structural use can also be used in non-structural applications. Heavy duty load-bearing boards are also permissible in structural and non-structural applications; the product standards for particle boards, OSB and fibreboards contain definitions of „heavy duty“; a direct correlation of “structural / non-structural” areas of application does not exist for plywood, LVL or solid wood panels.

