




**DECLARATION OF PERFORMANCE – No.: Binderholz-01-SWP/1 S**

**Changed on 21.04.2016**

Referring to Regulation No. 305/2011 (BauPVo)

1. Unique identification code of the product-type	SWP/1 S-D																																																																																																																																																																																								
2. Type, batch or serial number or any other element allowing identification of the construction product	SWP/1 S-D (thickness, 12-60), three-layer solid wood panel (L3) or five-layer (L5)																																																																																																																																																																																								
3. Name and address of the manufacturer	Binderholz GmbH, Gewerbegebiet 2, A-5113 St. Georgen																																																																																																																																																																																								
4. Intended uses of the construction product	Solid wood panel according to EN 13353:2011, article 3.2.2 for internal use as structural components in dry conditions																																																																																																																																																																																								
5. System of assessment and verification	2+																																																																																																																																																																																								
6. Applicable relevant harmonised standard	EN 13986:2004																																																																																																																																																																																								
Name and identification number of the institute: The Development and Testing Laboratory Holztechnologie Dresden GmbH (NB No. 0766) has performed the first inspection of the plant and the factory production control (WKP) after the system 2+, carries out the continuous monitoring, evaluation and evaluation of the WKP.																																																																																																																																																																																									
7. European Technical Assessment (ETA): not applicable																																																																																																																																																																																									
8. Essential features	<table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="4">Thickness in mm</th> </tr> <tr> <th colspan="2"></th> <th>(min. 12) – 20</th> <th>&gt;20 – 30</th> <th>&gt;30 – 42</th> <th>&gt;42 – (max. 80)</th> </tr> </thead> <tbody> <tr> <td rowspan="14" style="writing-mode: vertical-rl; transform: rotate(180deg);">strength [N/mm<sup>2</sup>]</td> <td colspan="5" style="text-align: center;">Panel loads</td> </tr> <tr> <td>Bending strength in N/mm<sup>2</sup></td> <td><math>f_{m,0}</math></td> <td>35</td> <td>30</td> <td>16</td> <td>12</td> </tr> <tr> <td></td> <td><math>f_{m,90}</math></td> <td>5</td> <td>5</td> <td>9</td> <td>9</td> </tr> <tr> <td>Share</td> <td><math>f_{r,0}</math></td> <td>1,6</td> <td>1,6</td> <td>1,2</td> <td>1,4</td> </tr> <tr> <td></td> <td><math>f_{r,90}</math></td> <td>1,4</td> <td>1,4</td> <td>1,4</td> <td>1,4</td> </tr> <tr> <td colspan="5" style="text-align: center;">Disc loading</td> </tr> <tr> <td>Bending strength in N/mm<sup>2</sup></td> <td><math>f_{p,0}</math></td> <td>25</td> <td>14</td> <td>12</td> <td>10</td> </tr> <tr> <td></td> <td><math>f_{p,90}</math></td> <td>12</td> <td>12</td> <td>12</td> <td>12</td> </tr> <tr> <td>Tensile</td> <td><math>f_{t,0}</math></td> <td>16</td> <td>9</td> <td>6</td> <td>6</td> </tr> <tr> <td></td> <td><math>f_{t,90}</math></td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>Compressive</td> <td><math>f_{c,0}</math></td> <td>16</td> <td>16</td> <td>10</td> <td>10</td> </tr> <tr> <td></td> <td><math>f_{c,90}</math></td> <td>10</td> <td>10</td> <td>16</td> <td>16</td> </tr> <tr> <td>Share</td> <td><math>f_{v,0}</math></td> <td>4</td> <td>4</td> <td>3,5</td> <td>2,5</td> </tr> <tr> <td></td> <td><math>f_{v,90}</math></td> <td>5</td> <td>3,5</td> <td>2,5</td> <td>2</td> </tr> <tr> <td rowspan="14" style="writing-mode: vertical-rl; transform: rotate(180deg);">stiffness [N/mm<sup>2</sup>]</td> <td colspan="5" style="text-align: center;">Panel loads</td> </tr> <tr> <td>Bending strength in N/mm<sup>2</sup></td> <td><math>E_{m,0}</math></td> <td>10000</td> <td>8200</td> <td>7600</td> <td>7100</td> </tr> <tr> <td></td> <td><math>E_{m,90}</math></td> <td>550</td> <td>550</td> <td>1500</td> <td>1500</td> </tr> <tr> <td>Share</td> <td><math>G_{r,0}</math></td> <td>41</td> <td>41</td> <td>41</td> <td>41</td> </tr> <tr> <td></td> <td><math>G_{r,90}</math></td> <td>41</td> <td>41</td> <td>41</td> <td>41</td> </tr> <tr> <td colspan="5" style="text-align: center;">Disc loads</td> </tr> <tr> <td>Bending strength in N/mm<sup>2</sup></td> <td><math>E_{p,0}</math></td> <td>4700</td> <td>2900</td> <td>2400</td> <td>1800</td> </tr> <tr> <td></td> <td><math>E_{p,90}</math></td> <td>3500</td> <td>3500</td> <td>4700</td> <td>4700</td> </tr> <tr> <td>Tensile</td> <td><math>E_{t,0}</math></td> <td>4700</td> <td>3500</td> <td>2400</td> <td>2400</td> </tr> <tr> <td></td> <td><math>E_{t,90}</math></td> <td>2900</td> <td>2900</td> <td>2900</td> <td>2900</td> </tr> <tr> <td>Shear</td> <td><math>G_{v,0}</math></td> <td>470</td> <td>470</td> <td>470</td> <td>470</td> </tr> <tr> <td></td> <td><math>G_{v,90}</math></td> <td>470</td> <td>470</td> <td>470</td> <td>470</td> </tr> <tr> <td colspan="2">Shock shear as point load resistance and point load stiffness</td> <td colspan="3">npd</td> </tr> <tr> <td colspan="2">Wall disc carrying capacity</td> <td colspan="3">npd</td> </tr> <tr> <td colspan="2">shock resistance</td> <td colspan="3">npd</td> </tr> </tbody> </table>						Thickness in mm						(min. 12) – 20	>20 – 30	>30 – 42	>42 – (max. 80)	strength [N/mm <sup>2</sup> ]	Panel loads					Bending strength in N/mm <sup>2</sup>	$f_{m,0}$	35	30	16	12		$f_{m,90}$	5	5	9	9	Share	$f_{r,0}$	1,6	1,6	1,2	1,4		$f_{r,90}$	1,4	1,4	1,4	1,4	Disc loading					Bending strength in N/mm <sup>2</sup>	$f_{p,0}$	25	14	12	10		$f_{p,90}$	12	12	12	12	Tensile	$f_{t,0}$	16	9	6	6		$f_{t,90}$	6	6	6	6	Compressive	$f_{c,0}$	16	16	10	10		$f_{c,90}$	10	10	16	16	Share	$f_{v,0}$	4	4	3,5	2,5		$f_{v,90}$	5	3,5	2,5	2	stiffness [N/mm <sup>2</sup> ]	Panel loads					Bending strength in N/mm <sup>2</sup>	$E_{m,0}$	10000	8200	7600	7100		$E_{m,90}$	550	550	1500	1500	Share	$G_{r,0}$	41	41	41	41		$G_{r,90}$	41	41	41	41	Disc loads					Bending strength in N/mm <sup>2</sup>	$E_{p,0}$	4700	2900	2400	1800		$E_{p,90}$	3500	3500	4700	4700	Tensile	$E_{t,0}$	4700	3500	2400	2400		$E_{t,90}$	2900	2900	2900	2900	Shear	$G_{v,0}$	470	470	470	470		$G_{v,90}$	470	470	470	470	Shock shear as point load resistance and point load stiffness		npd			Wall disc carrying capacity		npd			shock resistance		npd		
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Reaction to fire		Fire class	Minimum thickness	End application condition
		D-s2,d0	12 mm	without air gap behind the wood material
			15 mm	with closed air gap behind the wood material
			18 mm	with open air gap behind the wood material
		D-s2,d2	12 mm	with closed air gap or open air gap of not more than 22 mm behind the wood material
Durability			EN 13986 tab. 9	
Release of formaldehyde			E1	
Release of pentachlorophenol			≤ 5 ppm	
Airborne sound insulation			$R = 13 \times \lg(m_A) + 14$	
Sound absorption $\alpha$			0,10 for frequency range 250 – 500 Hz 0,30 for frequency range 1000 – 2000 Hz	
Water vapour permeability $\mu$			- mean density 300 kg/m <sup>3</sup> : $\mu$ wet cup50, $\mu$ dry cup 150 - mean density 500 kg/m <sup>3</sup> : $\mu$ wet cup70, $\mu$ drycup 200	
Embedding strength			npd	
Air permeability			npd	
Durability	Quality of gluing		SWP/1 (after cold water storage)	
	Transverse tensile strength		npd	
	Thickness swelling		npd	
	Moisture resistance		SWP/1	
	mechanical (i.e., creep creep)		npd	
NPD: Characteristic values not set				
9. Signed for and on behalf of the manufacturer by:				
 Matteo Binder Geschäftsführer		St. Georgen, 21.04.2016		



binderholz

**DECLARATION OF PERFORMANCE – No.: Binderholz-02-SWP/2 S**

**Changed on 05-11-2020**

Referring to Regulation No. 305/2011 (BauPVo)

tiptop timber

1. Unique identification code of the product-type	SWP/2 SD
2. Type, batch or serial number or any other element allowing identification of the construction product	SWP/2 S-D (thickness, 12-60 mm), three-layer solid wood panel (L3) or five-layer (L5)
3. Name and address of the manufacturer	Binderholz GmbH, Gewerbegebiet 2, A-5113 St. Georgen
4. Intended uses of the construction product	Solid wood panel according to EN 13353:2011, article 3.2.2 for internal use as structural components in humid conditions
5. System of assessment and verification	2+
6. Applicable relevant harmonised standard	EN 13986:2004+A1:2015
7. Name and identification number of the institute: The Development and Testing Laboratory Holztechnologie Dresden GmbH (NB No. 0766) has performed the first inspection of the plant and the factory production control (WKP) after the system 2+, carries out the continuous monitoring, evaluation and evaluation of the WKP.	
8. European Technical Assessment (ETA): not applicable	
9. Essential features	

Thickness in mm															
S-values related to the current standard EN 12369-3, SD-individual, declared values (Multistat)															
Thickness [mm] L3, L5/SD	(min. 12) - 20			> 20 - 30			> 30 - 42					> 42 - 60			
	S	L3	SD	S	L3	SD	S	L3	SD	L3	L5	L5	S	L3	SD
		19		22	27		32	40	42	35	42		50	60	
		L3		L3	L3		L3	L3	L3	L5	L5		L3	L3	
	S	SD	S	SD	SD	S	SD	SD	SD	SD	SD	S	SD	SD	
Characteristic strength [N/mm <sup>2</sup> ] Panel loads															
Bending strength $f_{m,0}$	35	40	30	40	37	16	33	26	25	31	36	12	32	28	
Bending strength $f_{m,90}$	5	12	5	10	9	9	13	18	18	21	19	9	14	16	
Share $f_{v,0}$	4		4					3,5					2,5		
Share $f_{v,90}$	5		3,5					2,5					2		
Characteristic strength [N/mm <sup>2</sup> ] Disc loads															
Bending strength $f_{p,0}$	25		14					12					10		
Bending strength $f_{p,90}$	12		12					12					12		
Tensile $f_{t,0}$	16		9					6					6		
Tensile $f_{t,90}$	6		6					6					6		
Compressive $f_{c,0}$	16		16					10					10		
Compressive $f_{c,90}$	10		10					16					16		
Share $f_{r,0}$	1,6		1,6					1,2					1,2		
Share $f_{r,90}$	1,4		1,4					1,4					1,4		

Medium stiffness [N/mm <sup>2</sup> ] Panel loads														
Bending strength $E_{m,0}$	10000	11000	8200	11100	11500	7600	10400	9000	9000	9400	9600	7100	10800	9800
Bending stren. $E_{m,90}$	550	1500	550	1100	700	1500	1800	3100	3400	4200	3500	1500	2100	2800
Share $G_{v,0}$	470		470					470					470	
Share $G_{v,90}$	470		470					470					470	

Medium stiffness [N/mm <sup>2</sup> ] Disc loads				
Bending stiffness $E_{p,0}$	4700	2900	2400	1800
Bending stiffness $E_{p,90}$	3500	3500	4700	4700
Tensile $E_{t,0}$	4700	3500	2400	2400
Tensile $E_{t,90}$	2900	2900	2900	2900
Share $G_{r,0}$	41	41	41	41
Share $G_{r,90}$	41	41	41	41

Shock shear as point load resistance and point load stiffness			npd
Wall disc carrying capacity			npd
shock resistance			npd
Reaction to fire	Fire class	Minimum thickness	End application condition
	D-s2,d0	12 mm	without air gap behind the wood material
		15 mm	with closed air gap behind the wood material
		18 mm	with open air gap behind the wood material
D-s2,d2	12 mm	with closed air gap or open air gap of not more than 22 mm behind the wood material	
Durability			EN 13986 tab. 10
Release of formaldehyde			E1
Release of pentachlorophenol			≤ 5 ppm
Airborne sound insulation			$R = 13 \times \lg(m_A) + 14$
Sound absorption $\alpha$			0,10 for frequency range 250 – 500 Hz 0,30 for frequency range 1000 – 2000 Hz
Water vapour permeability $\mu$			- mean density 300 kg/m <sup>3</sup> : $\mu$ wet cup50, $\mu$ dry cup 150 - mean density 500 kg/m <sup>3</sup> : $\mu$ wet cup70, $\mu$ dry cup 200
Embedding strength			npd
Air permeability			npd
Durability	Quality of gluing		SWP/2 (after boiling water storage)
	Transverse tensile strength		npd
	Thickness swelling		npd
	Moisture resistance		SWP/2
	mechanical (i.e., creep creep)		npd

NPD: Characteristic values not set

10. Signed for and on behalf of the manufacturer by:

Matteo Binder

Geschäftsführer

St. Georgen, 11-05-2020



binderholz

**DECLARATION OF PERFORMANCE – No.: Binderholz-03-SWP/3 S**

**Changed on 05-11-2020**

Referring to Regulation No. 305/2011 (BauPVo)

tiptop timber

1. Unique identification code of the product-type	SWP/3 SD
2. Type, batch or serial number or any other element allowing identification of the construction product	SWP/3 S-D (thickness, 12-60 mm), three-layer solid wood panel (L3) or five-layer (L5)
3. Name and address of the manufacturer	Binderholz GmbH, Gewerbegebiet 2, A-5113 St. Georgen
4. Intended uses of the construction product	Solid wood panel according to EN 13353:2011, article 3.2.2 as structural components for external use
5. System of assessment and verification	2+
6. Applicable relevant harmonised standard	EN 13986:2004+A1:2015
7. Name and identification number of the institute: The Development and Testing Laboratory Holztechnologie Dresden GmbH (NB No. 0766) has performed the first inspection of the plant and the factory production control (WKP) after the system 2+, carries out the continuous monitoring, evaluation and evaluation of the WKP.	
8. European Technical Assessment (ETA): not applicable	
9. Essential features	

Thickness in mm															
S-values related to the current standard EN 12369-3, SD-individual, declared values (Multistat)															
Thickness [mm] L3, L5/SD	(min. 12) - 20			> 20 - 30			> 30 - 42					> 42 - 60			
	S	L3	SD	S	L3	SD	S	L3	SD	L3	L5	L5	S	L3	SD
		19		22	27		32	40	42	35	42		50	60	
		L3		L3	L3		L3	L3	L3	L5	L5		L3	L3	
	S	SD		S	SD	SD	S	SD	SD	SD	SD		S	SD	SD
Characteristic strength [N/mm <sup>2</sup> ] Panel loads															
Bending strength $f_{m,0}$	35	40	30	40	37	16	33	26	25	31	36	12	32	28	
Bending strength $f_{m,90}$	5	12	5	10	9	9	13	18	18	21	19	9	14	16	
Share $f_{v,0}$	4		4			3,5					2,5				
Share $f_{v,90}$	5		3,5			2,5					2				
Characteristic strength [N/mm <sup>2</sup> ] Disc loads															
Bending strength $f_{p,0}$	25		14			12					10				
Bending strength $f_{p,90}$	12		12			12					12				
Tensile $f_{t,0}$	16		9			6					6				
Tensile $f_{t,90}$	6		6			6					6				
Compressive $f_{c,0}$	16		16			10					10				
Compressive $f_{c,90}$	10		10			16					16				
Share $f_{r,0}$	1,6		1,6			1,2					1,2				
Share $f_{r,90}$	1,4		1,4			1,4					1,4				

Medium stiffness [N/mm <sup>2</sup> ] Panel loads														
Bending strength $E_{m,0}$	10000	11000	8200	11100	11500	7600	10400	9000	9000	9400	9600	7100	10800	9800
Bending stren. $E_{m,90}$	550	1500	550	1100	700	1500	1800	3100	3400	4200	3500	1500	2100	2800
Share $G_{v,0}$	470		470			470					470			
Share $G_{v,90}$	470		470			470					470			

Medium stiffness [N/mm <sup>2</sup> ] Disc loads				
Bending stiffness $E_{p,0}$	4700	2900	2400	1800
Bending stiffness $E_{p,90}$	3500	3500	4700	4700
Tensile $E_{t,0}$	4700	3500	2400	2400
Tensile $E_{t,90}$	2900	2900	2900	2900
Share $G_{r,0}$	41	41	41	41
Share $G_{r,90}$	41	41	41	41

Shock shear as point load resistance and point load stiffness		npd
Wall disc carrying capacity		npd
shock resistance		npd
Reaction to fire	Fire class	Minimum thickness
	D-s2,d0	12 mm
		15 mm
		18 mm
D-s2,d2	12 mm	
End application condition		
		without air gap behind the wood material
		with closed air gap behind the wood material
		with open air gap behind the wood material
		with closed air gap or open air gap of not more than 22 mm behind the wood material
Durability		EN 13986 tab. 10
Release of formaldehyde		E1
Release of pentachlorophenol		≤ 5 ppm
Airborne sound insulation		$R = 13 \times \lg(m_A) + 14$
Sound absorption $\alpha$		0,10 for frequency range 250 – 500 Hz 0,30 for frequency range 1000 – 2000 Hz
Water vapour permeability $\mu$		- mean density 300 kg/m <sup>3</sup> : $\mu$ wet cup50, $\mu$ dry cup 150 - mean density 500 kg/m <sup>3</sup> : $\mu$ wet cup70, $\mu$ drycup 200
Embedding strength		npd
Air permeability		npd
Durability	Quality of gluing	SWP/3 (after boiling change storage)
	Transverse tensile strength	npd
	Thickness swelling	npd
	Moisture resistance	SWP/3
	mechanical (i.e., creep creep)	npd

NPD: Characteristic values not set

10. Signed for and on behalf of the manufacturer by:



Matteo Binder

Geschäftsführer

St. Georgen, 11-05-2020