PRODUCT DATA SHEET

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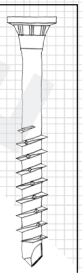

SOLIDA

STAINLESS STEEL SELFTAPPING SCREW

DESCRIPTION

SOLIDA is a universal selftapping stainless steel screw for wooden or wood like decking / cladding materials

APPLICATION

Direct visual mounting for exterior applications e.g cover sections, rhombus or tongue and groove profiles, decking / cladding applications, etc.

FUNCTION DESCRIPTION

The wood or wood like based material component is visually fixed derectly through, without [optional with] pre-drilling the board into the substructure.

MATERIAL

SOLIDA1 Hardened stainless steel 1.4006/X12Cr13/AISI 410
SOLIDA4 Stainless steel 1.4401/X5CrNiMo17-12-2/AISI 316

Additional information:
SOLIDA1 hardened stainless steel attains a 50% higher breaking torque as the standard A2 stainless steel grades due to the special hardening process [heat treating].
This type of hardening process makes non-magnetic rust free stainless steel magnetic.

STANDARD - CE MARK

The scope of application is not subject to approvals, certificates, etc. due to the lack of standard conformity requirements.

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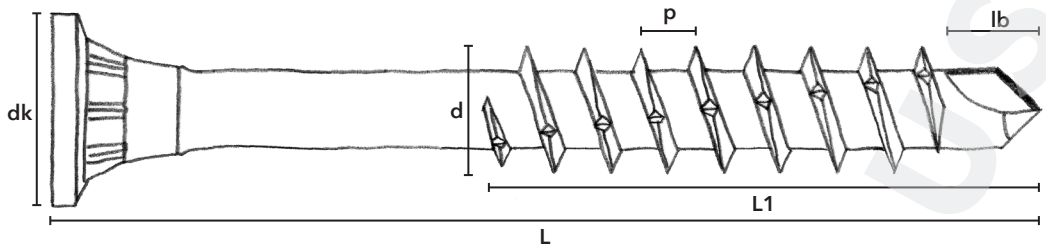
DIMENSIONS



SOLIDA						
	TYPE	dk	d	p	lb	TX
	3,2 mm	5,00 - 5,25	3,10 - 3,25	1,20 - 1,40	2,50 - 3,00	TX10
	4,0 mm	6,00 - 6,50	3,75 - 4,00	1,70 - 1,90	2,50 - 3,00	TX20
	4,5 mm	6,50 - 7,00	4,30 - 4,50	1,90 - 2,10	2,50 - 3,00	TX20
	5,0 mm	7,50 - 8,00	4,70 - 5,00	2,10 - 2,30	3,50 - 4,00	TX25
	5,5 mm	7,50 - 8,00	5,20 - 5,50	2,30 - 2,50	3,50 - 4,00	TX25
	6,0 mm	9,50 - 10,00	5,70 - 6,00	2,50 - 2,70	4,00 - 4,50	TX25

L	L1 [3,2]	L1 [4,0]	L1 [4,5]	L1 [5,0]	L1 [5,5]	L1 [6,0]
25 +/- 0,5	16 +/- 0,5					
30 +/- 0,5	18 +/- 0,5	18 +/- 0,5				
35 +/- 0,5	21 +/- 0,5	21 +/- 0,5				
40 +/- 0,5	24 +/- 0,5	24 +/- 0,5	24 +/- 0,5	24 +/- 0,5		
45 +/- 0,5		26 +/- 0,5	26 +/- 0,5	26 +/- 0,5	26 +/- 0,5	
50 +/- 0,5	28 +/- 0,5	28 +/- 0,5	28 +/- 0,5	28 +/- 0,5	28 +/- 0,5	
55 +/- 1,0		31 +/- 0,5	31 +/- 0,5	31 +/- 0,5	31 +/- 0,5	
60 +/- 1,0	34 +/- 0,5	34 +/- 0,5	34 +/- 0,5	34 +/- 0,5	34 +/- 0,5	
65 +/- 1,0			37 +/- 0,5	37 +/- 0,5	37 +/- 0,5	
70 +/- 1,0			40 +/- 0,5	40 +/- 0,5	40 +/- 0,5	40 +/- 0,5
80 +/- 1,0				44 +/- 0,5		44 +/- 0,5
90 +/- 1,0				50 +/- 0,5		50 +/- 0,5
100 +/- 1,5				55 +/- 0,5		55 +/- 0,5
110 +/- 1,5						60 +/- 0,5
120 +/- 1,5						60 +/- 0,5

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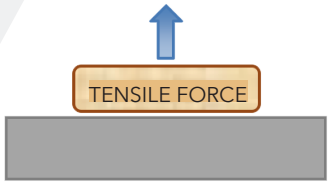
TEST PROCEDURE
Connections with mechanical connecting means - general principles for the determination of strength and deformation behavior.

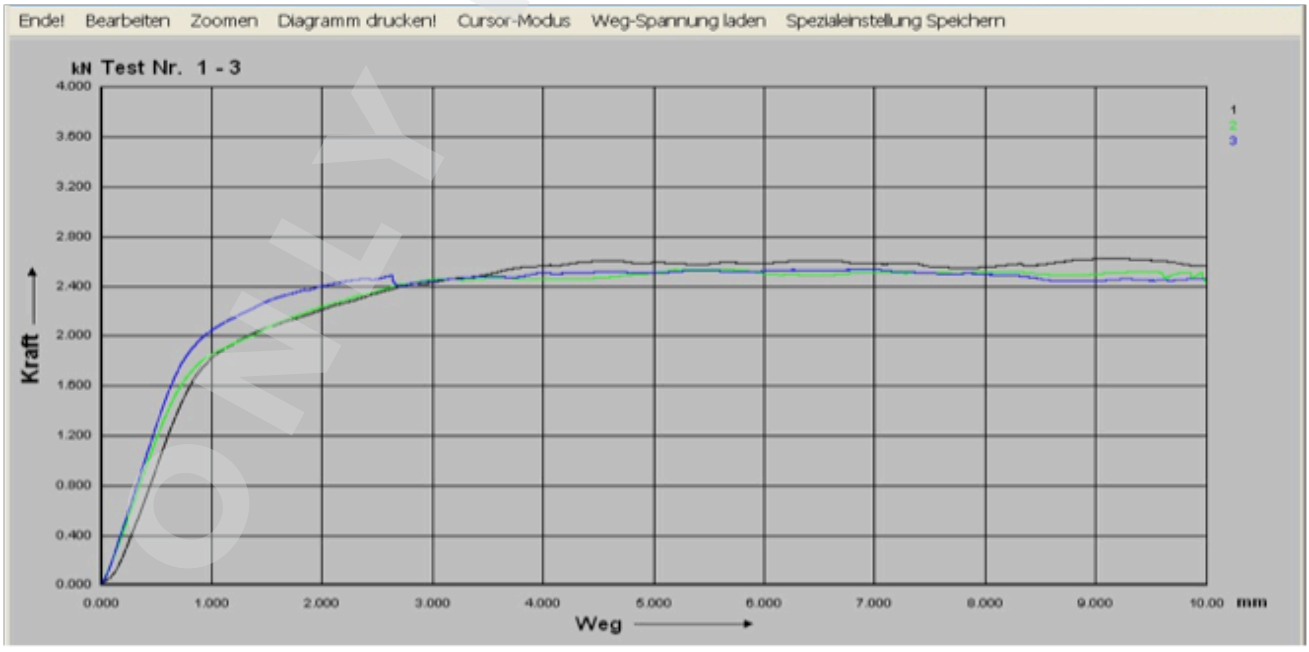
SELECTED LOADING METHODS
Applied threshold force, feed rate 4.00 mm / min.
Loads are increased up to breaking point.

MECHANICAL CHARACTERISTICS
The calculation of limit values were determined by tensile loading. The mechanical properties of strength and deformation behavior have been identified through different directions meeting a node point.

TEST PARAMETERS AND RESULTS
TENSILE FORCE
Force absorption F [kN] / deformation displacement S [mm]
Parameter set max. Force consumption up 10 mm deformation



TEST PIECE SUMMARY	SOLIDA1 Ø 3,2 mm_LARCH					
	F [kN]	S [mm]	F [kN]	S [mm]	F [kN]	S [mm]
	2,62	9,12	2,57	4,00	2,40	2,00
	2,54	5,62	2,53	4,00	2,23	2,00
	2,54	6,98	2,47	4,00	2,20	2,00
Mean Value	**2,56**	7,24	**2,52**	4,00	**2,28**	2,00
Minimum	2,54	5,62	2,47	4,00	2,20	2,00
Maximum	2,62	9,12	2,57	4,00	2,40	2,00
Max. load_head pull through resistance [node point 2 pcs. 3,2 x 60 mm]						



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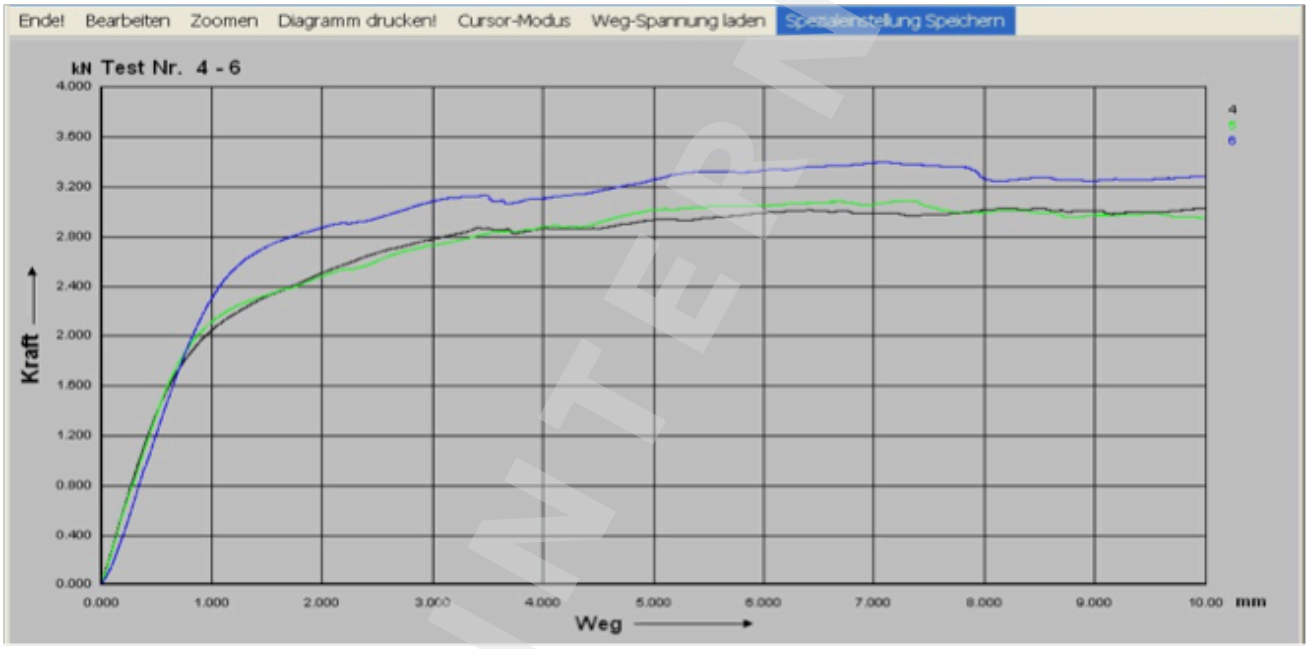
TEST PIECE SUMMARY	SOLIDA1 Ø 4,0 mm_LARCH					
	F [kN]	S [mm]	F [kN]	S [mm]	F [kN]	S [mm]
	3,03	8,52	2,87	4,00	3,10	2,00
	3,08	7,31	2,53	4,00	2,90	2,00
	3,40	7,10	2,50	4,00	2,87	2,00
Mean Value	**3,17**	7,64	**2,63**	4,00	**2,95**	2,00
Minimum	3,03	7,10	2,50	4,00	2,87	2,00
Maximum	3,40	8,52	2,87	4,00	3,10	2,00
Max. load_head pull through resistance [node point 2 pcs. 4,0 x 50 mm]						



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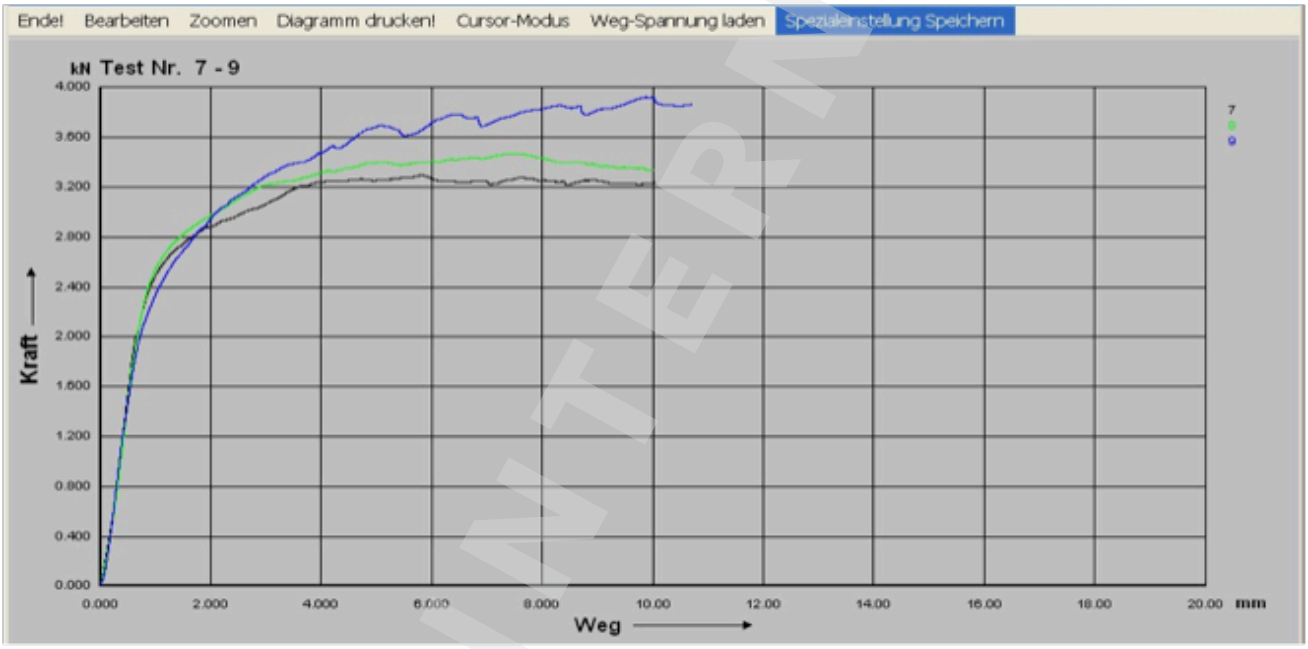
TEST PIECE SUMMARY	SOLIDA1 Ø 4,5 mm_LARCH					
	F [kN]	S [mm]	F [kN]	S [mm]	F [kN]	S [mm]
	3,29	5,84	3,46	4,00	2,97	2,00
	3,46	7,40	3,33	4,00	2,97	2,00
	3,92	9,99	3,27	4,00	2,90	2,00
Mean Value	**3,56**	7,74	**3,35**	4,00	**2,94**	2,00
Minimum	3,29	5,84	3,27	4,00	2,90	2,00
Maximum	3,92	9,99	3,46	4,00	2,97	2,00
Max. load_head pull through resistance [node point 2 pcs. 4,5 x 70 mm]						



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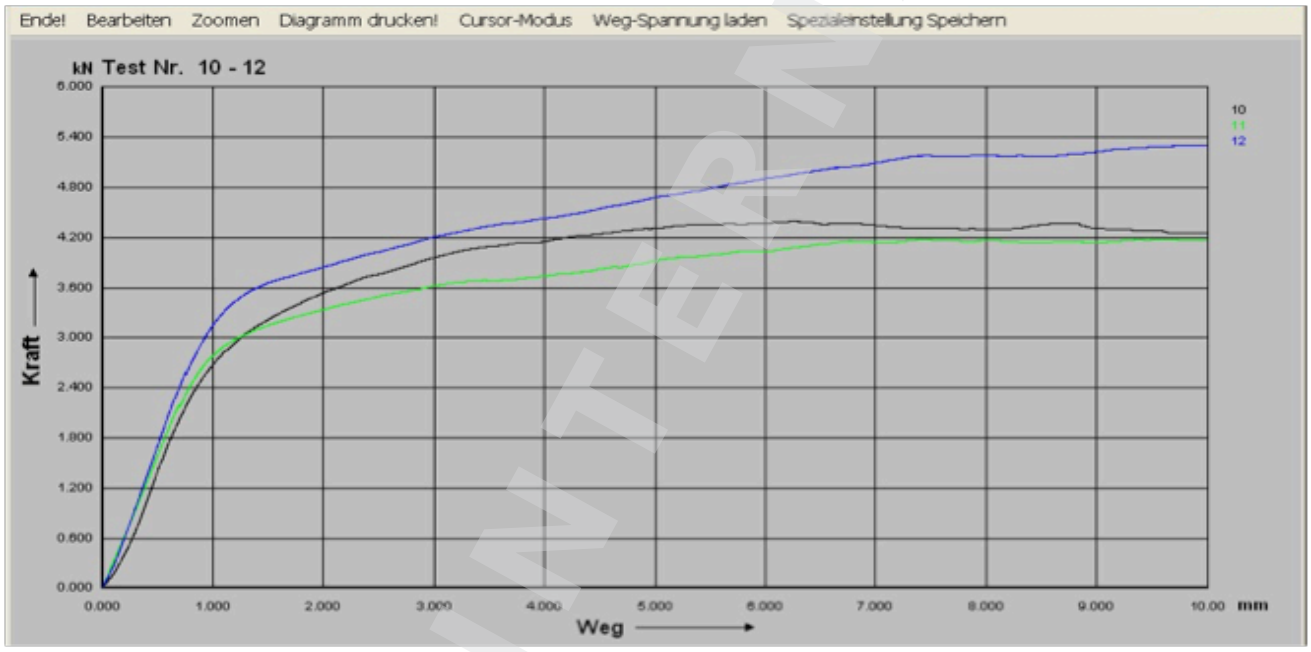
TEST PIECE SUMMARY	SOLIDA1 Ø 5,0 mm_LARCH					
	F [kN]	S [mm]	F [kN]	S [mm]	F [kN]	S [mm]
	4,39	6,26	4,20	4,00	3,85	2,00
	4,18	7,45	3,95	4,00	3,55	2,00
	5,30	9,93	3,65	4,00	3,35	2,00
Mean Value	**4,62**	7,88	**3,93**	4,00	**3,58**	2,00
Minimum	4,18	6,26	3,65	4,00	3,35	2,00
Maximum	5,30	9,93	4,20	4,00	3,85	2,00
Max. load_head pull through resistance [node point 2 pcs. 5,0 x 80 mm]						



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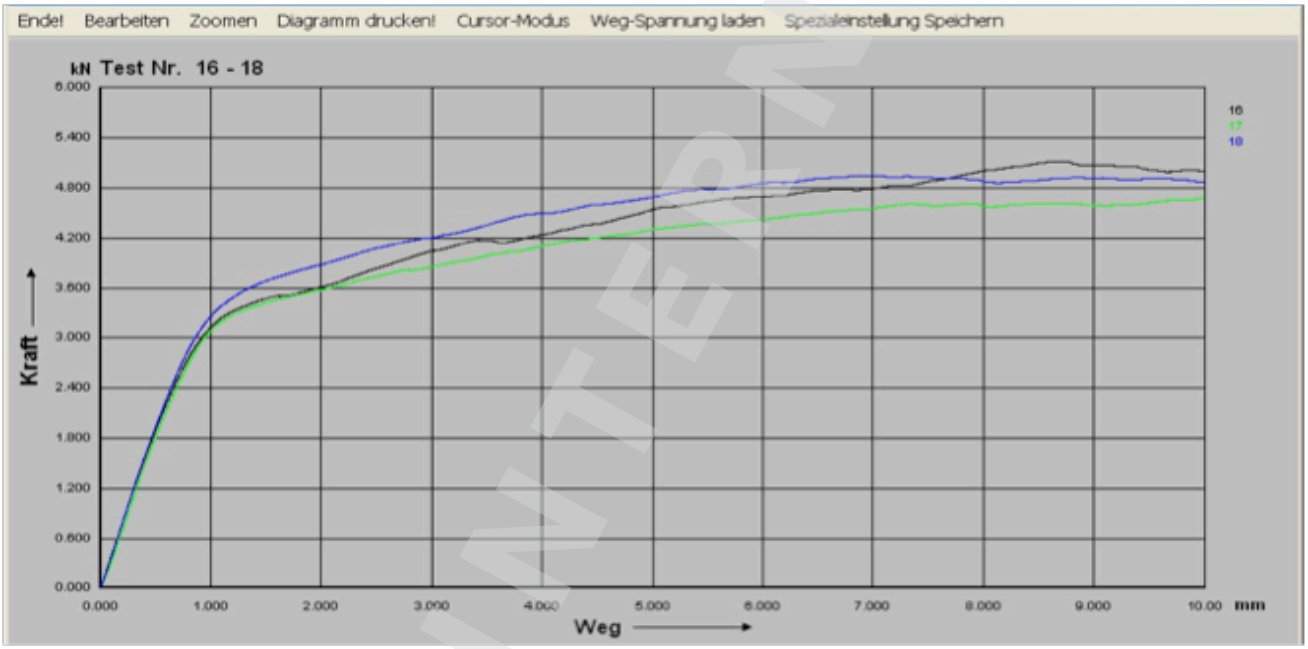
TEST PIECE SUMMARY	SOLIDA1 Ø 5,5 mm_LARCH					
	F [kN]	S [mm]	F [kN]	S [mm]	F [kN]	S [mm]
	5,11	8,63	4,50	4,00	3,90	2,00
	4,69	10,04	4,25	4,00	3,60	2,00
	4,94	6,95	4,10	4,00	3,60	2,00
Mean Value	**4,91**	8,54	**4,28**	4,00	**3,70**	2,00
Minimum	4,69	6,95	4,10	4,00	3,60	2,00
Maximum	5,11	10,04	4,50	4,00	3,90	2,00
Max. load_head pull through resistance [node point 2 pcs. 5,5 x 60 mm]						



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TEST PIECE SUMMARY	SOLIDA1 Ø 6,0 mm_LARCH					
	F [kN]	S [mm]	F [kN]	S [mm]	F [kN]	S [mm]
	9,89	6,71	8,00	4,00	6,17	2,00
	8,40	8,81	7,33	4,00	5,74	2,00
	9,59	10,24	6,66	4,00	5,66	2,00
Mean Value	**9,29**	8,59	**7,33**	4,00	**5,86**	2,00
Minimum	8,40	6,71	6,66	4,00	5,66	2,00
Maximum	9,89	10,24	8,00	4,00	6,17	2,00
Max. load_head pull through resistance [node point 2 pcs. 6,0 x 100 mm]