NATIONAL DECLARATION OF PERFORMANCE NO:

KDWU-15977/3 ACC

Wersja: V-1.2023 EN

1. Name and trade name of construction product:

AL/FE closed rivets, AL/INOX closed rivets, INOX/INOX closed rivets.
AL/FE open rivets, AL/INOX open rivets, INOX/INOX open rivets.

2. Type of the construction product:

Aluminum-steel, aluminum-stainless steel, stainless steel-stainless steel closed rivets.
Aluminum-steel, aluminum-stainless steel, stainless steel-stainless steel open rivets.

3. Intended uses or uses:

Closed rivets are intended for watertight overlapping of metal sheets.
Open rivets are intended for overlapping of metal sheets when tightness is not require.

4. Name and address of the manufacturer and place of manufacture of the product:

Simpson Strong-Tie Etanco P.S.A., Al. Jana Pawła II 1, 81-345 Gdynia,
Address of production plant: ul. Olsztyńska 30, 11-130 Orneta

5. Name and address of the authorized representative, if established:

N/A

6. National system used for assessment and verification of constancy of performance:

System 4

7. National technical specification:

7a. Product standard **PN-EN ISO 15973, PN-EN ISO 15977**
N Name of accredited certification body, accreditation number and national certificate number or name of accredited laboratory / laboratory and accreditation number: **N/A**

7b. National Technical Assessment: **N/A**
Technical Assessment Unit / National Technical Assessment Unit: **N/A**
Name of accredited certification body and certificate number: **N/A**

8. Declared performance properties

Essential characteristics of the construction product for the intended use or uses		Declared usable features	Comments
Closed rivets	Form and dimension	According to fig. 1 and table 1	PN-EN ISO 15973
	Mechanical properties	According to table 3	
Open rivets	Form and dimension	According to fig. 1 and table 1	PN-EN ISO 15977
	Mechanical properties	According to table 3	

Table 1.

Rivet dimension [mm] acc. PN-EN ISO 15977									
Rivet	d	nom	2,40	3,00	3,20	4,00	4,80	5,00	6,00	6,40
		max	2,48	3,08	3,28	4,08	4,88	5,08	6,08	6,48
		min	2,25	2,85	3,05	3,85	4,65	4,85	5,85	6,25
	d	max	5,00	6,30	6,70	8,40	10,10	10,50	12,60	13,40
	k	min	4,20	5,40	5,80	6,90	8,30	8,70	10,80	11,60
	k	max	1,00	1,30	1,30	1,70	2,00	2,10	2,50	2,70
Mandrel	d,	max	1,55	2,00	2,00	2,45	2,95	2,95	3,40	3,90
	p	min	25,00	25,00	25,00	27,00	27,00	27,00	27,00	27,00
Rivet length w/ mandrel and protruding head	b	max	lmax + 3,5	lmax + 3,5	lmax + 4,0	lmax + 4,0	lmax + 4,5	lmax + 4,5	lmax + 5,0	lmax + 5,5
Rivet length lb nom = min		max	Recomended connection ranges							
4,0		5,0	0,5 to 2,0	0,5 to 1,5		-	-	-	-	
6,0		7,0	2,0 to 4,0	1,5 to 3,5		1,0 to 3,0	1,5 to 2,5	-	-	
8,0		9,0	4,0 to 6,0	3,5 to 5,0		3,0 to 5,0	2,5 to 4,0	2,0 to 3,0	-	
10,0		11,0	6,0 to 8,0	5,0 to 7,0		5,0 to 6,5	4,0 to 6,0	3,0 to 5,0	-	
12,0		13,0	8,0 to 9,5	7,0 to 9,0		6,5 to 8,5	6,0 to 8,0	5,0 to 7,0	3,0 to 6,0	
16,0		17,0	-	9,0 to 13,0		8,5 to 12,5	8,0 to 12,0	7,0 to 11,0	6,0 to 10,0	
20,0		21,0	-	13,0 to 17,0		12,5 to 16,5	12,0 to 15,0	11,0 to 15,0	10,0 to 14,0	
25,0		26,0	-	17,0 to 22,0		16,5 to 21,0	15,0 to 20,0	15,0 to 20,0	14,0 to 18,0	
30,0		31,0	-	-		-	20,0 to 25,0	20,0 to 25,0	18,0 to 23,0	

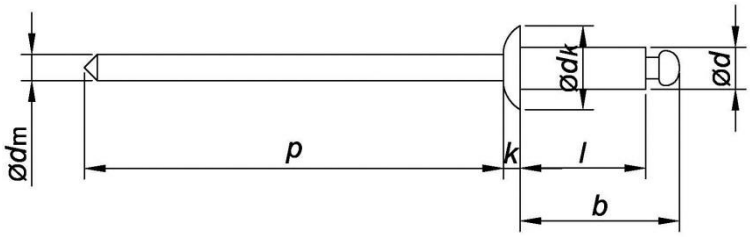

Table 2.

Passing-through hole diameters [mm] acc. PN-EN ISO 15977		
d	dh1	
nom	min	max
2,4	2,5	2,6
3,0	3,1	3,2
3,2	3,3	3,4
4,0	4,1	4,2
4,8	4,9	5,0
5,0	5,1	5,2
6,0	6,1	6,2
6,4	6,5	6,6

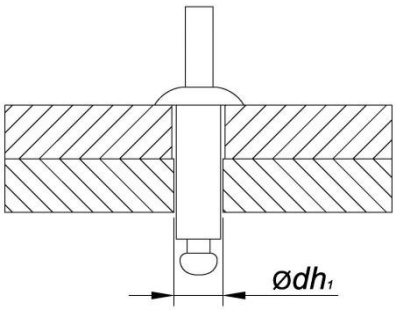

Table 3.

Mechanical properties of rivets acc. PN-EN ISO 15977					
d nom	Class L		Class H		Mendrel breaking load
	Shear loading min	Tesion loading min	Shear loading min	Tension loading min	max
[mm]	[N]	[N]	[N]	[N]	[N]
2,4	250	350	350	550	2000
3,0	400	550	550	850	3000
3,2	500	700	750	1100	3500
4,0	850	1200	1250	1800	5000
4,8	1200	1700	1850	2600	6500
5,0	1400	2000	2150	3100	6500
6,0	2100	3000	3200	4600	9000
6,4	2200	3150	3400	4850	11000

Table 4.

Rivet dimensions [mm] acc. PN-EN ISO 15973						
Rivet	d	nom	3,20	4,00	4,80	6,40
		max	3,28	4,08	4,88	6,48
		min	3,05	3,85	4,65	6,25
	dk	max	6,70	8,40	10,10	13,40
		min	5,80	6,90	8,30	11,60
	k	max	1,30	1,70	2,00	2,70
Mendrel	d,	max	1,85	2,35	2,77	3,71
	p	min	25,00	25,00	27,00	27,00
Rivet length l			Recomended connection ranges			
nom = min		max				
6,5		7,5	0,5 to 2,0	-	-	-
8,0		9,0	2,0 to 3,5	0,5 to 3,5	-	-
8,5		9,5	-	-	0,5 to 3,5	-
9,5		10,5	3,5 to 5,0	3,5 to 5,0	3,5 to 5,0	-
11,0		12,0	5,0 to 6,5	5,0 to 6,5	5,0 to 6,5	-
12,5		13,5	6,5 to 8,0	6,5 to 8,0	-	1,5 to 6,5
13,0		14,0	-	-	6,5 to 8,0	-
14,5		15,5	-	8,0 to 10,0	8,0 to 9,5	-
15,5		16,5	-	-	-	6,5 to 9,5
16,0		17,0	-	-	9,5 to 11,0	-
18,0		19,0	-	-	11,0 to 13,0	-
21,0		22,0	-	-	13,0 to 16,0	-

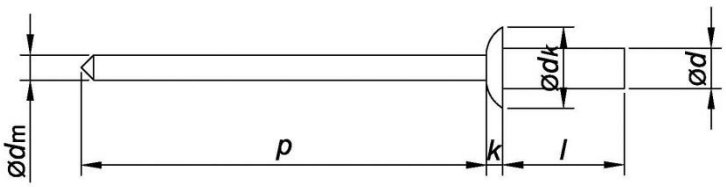

Table 5.

Passing-through hole diameters [mm] acc. PN-EN ISO 15973		
d	dh1	
nom	min	max
3,2	3,3	3,4
4,0	4,1	4,2
4,8	4,9	5,0
6,4	6,5	6,6

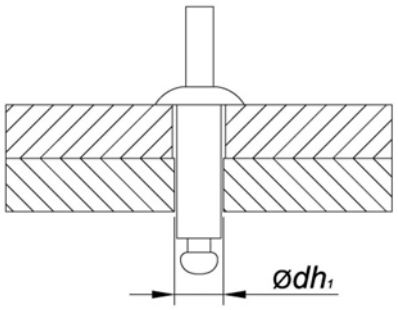

Table 6.

Mechanical properties of rivets acc. PN-EN ISO 15973			
d	Shear loading	Tension loading	Mendrel breaking load
nom	min	min	max
[mm]	[N]	[N]	[N]
3,2	1100	1450	3500
4,0	1600	2200	5000
4,8	2200	3100	7000
6,4	3600	4900	10230

9. The performance properties of the product specified above are in accordance with all the declared performance characteristics listed in paragraph 8. This national declaration of performance is issued in accordance with the Act of 16 April 2004 on construction products, under the sole responsibility of the manufacturer.

Place and date of issue

Orneta 01.01.2023

On behalf of the manufacturer signed

Sewer Maleszyński
Product Manager
Simpson Strong-Tie Eliance P.S.A.