



INSTYTUT TECHNIKI BUDOWLANEJ



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European Technical Assessment

ETA-12/0149
of 03/08/2023



General Part

Technical Assessment Body issuing the European Technical Assessment

Instytut Techniki Budowlanej

Trade name of the construction product

ETANCO Flat Roof Fasteners

Product family to which the construction product belongs

Fasteners for flexible roof waterproofing systems

Manufacturer

Simpson Strong-Tie Etanco P.S.A.
Al. Jana Pawła II 1,
81-345 Gdynia, Poland

Manufacturing plant

1. Simpson Strong-Tie Etanco P.S.A.
ul. Olsztyńska 30
11-130 Orneta, Poland
2. Plant 1
3. Plant 2
4. Plant 3
5. Plant 4
6. Plant 5

This European Technical Assessment contains

23 pages including 3 Annexes which form an integral part of this assessment

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of

European Assessment Document (EAD)
030351-00-0402 "Systems of mechanically fastened flexible roof waterproofing sheets"

This version replaces

ETA-12/0149 issued on 29/09/2020

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Specific Part

1 Technical description of the product

ETANCO Flat Roof Fasteners are mechanical fasteners for flexible roof waterproofing systems. The fasteners consist of a screws made of coated carbon steel or stainless steel (bi-metal), a washers with integrated sleeve made of plastic material (polypropylene) or a washers made of coated carbon steel and (optional) expansion sleeves made of plastic material (polyamide).

An illustration and the description of the products are given in Annex A.

The material properties, dimensions and tolerances not indicated in Annex A shall correspond to the information laid down in the technical information to this European technical assessment.

2 Specification of the intended use in accordance with the applicable European Assessment Document (EAD)

The performances given in Section 3 are only valid if the fasteners are used in compliance with the specifications and conditions given in Annex B.

The performances given in this European Technical Assessment are based on an assumed working life of the products of 10 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

Systems of mechanically fastened flexible roof waterproofing membrane according to EAD 030351-00-0402 should be covered by a separate European Technical Assessment.

3 Performance of the product and references to the methods used for its assessment

3.1 Performance of the product

3.1.1 Safety and accessibility in use (BWR 4)

3.1.1.1 Fastener axial load

Fastener axial loads are given in Annex C1 and C2.

3.1.1.2 Resistance to fastener unwinding

The fasteners are considered to be safe against unwinding. This was evaluated on the basis of the existing field experience of the manufacturer.

3.1.1.3 Mechanical resistance / brittleness of plastic fasteners

Plastic fasteners are resistant to impact and brittleness, after impact of weight from drop height $\geq 1,0$ m.

3.1.1.4 Resistance to corrosion of metallic fasteners

All elements made of coated carbon steel (screws and washers), subjected to 15 cycles of action of a humid atmosphere containing 2,0 l SO₂ do not show more than 15% surface corrosion.

3.1.1.5 Mechanical resistance after heat ageing of plastic fasteners

Plastic fasteners, after heat ageing, are resistant to impact and brittleness, after impact of weight from drop height $\geq 1,0$ m.

Plastic fasteners, after heat aging by the Charpy method, do not show a significant decline of mechanical resistance from the test results before heat ageing (difference $\leq 20\%$).

3.2 Methods used for the assessment

The assessment has been made in accordance with EAD 030351-00-0402.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

According to Decision 98/143/EC of the European Commission the system 2+ of assessment and verification of constancy of performance applies (see Annex V to regulation (EU) No 305/2011).

5 Technical details necessary for the implementation of the AVCP system, as provided in the applicable European Assessment Document (EAD)

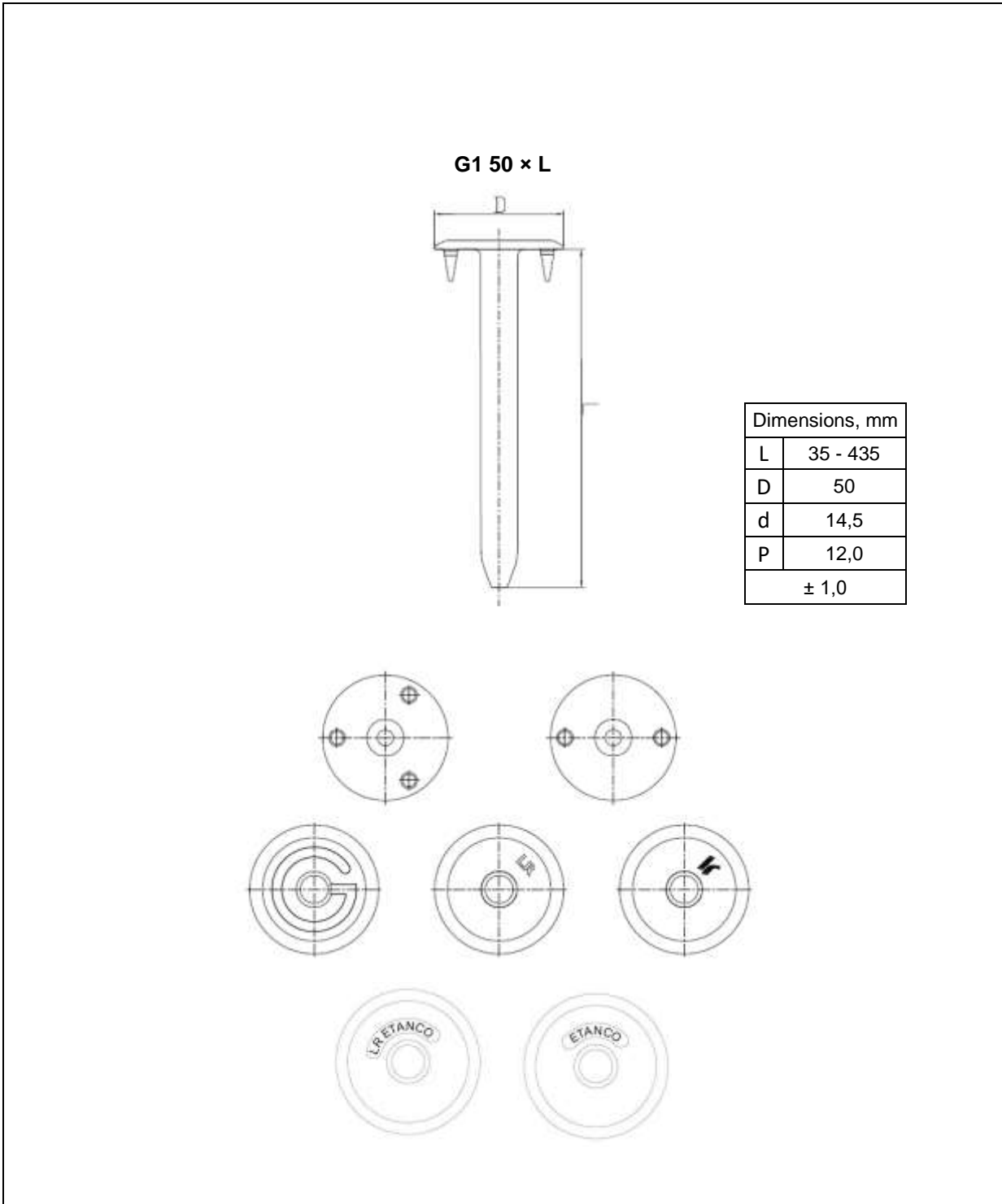
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited in Instytut Techniki Budowlanej.

For type testing the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line or plant. In such cases the necessary type testing has to be agreed between Instytut Techniki Budowlanej and the notified body.

Issued in Warsaw on 03/08/2023 by Instytut Techniki Budowlanej

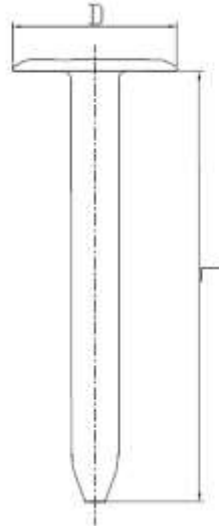


Anna Panek, MSc
Deputy Director of ITB

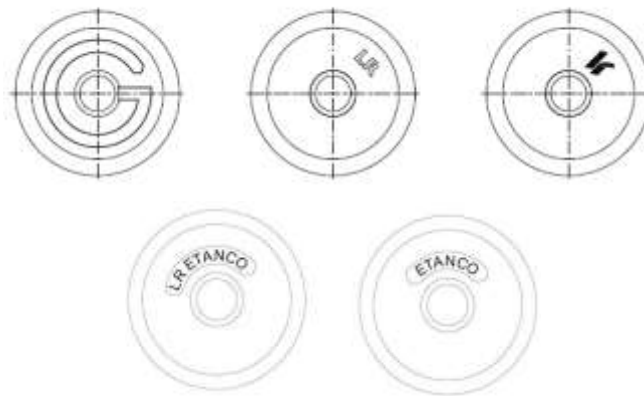


ETANCO Flat Roof Fasteners	Annex A1 of European Technical Assessment ETA-12/0149
Product description G1	

G2 50 × L



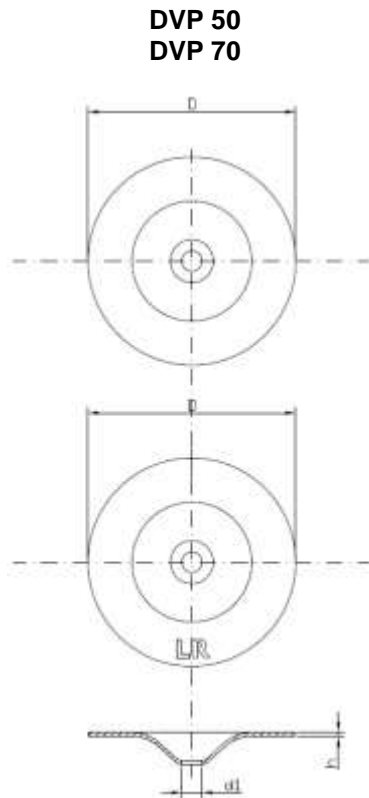
Dimensions, mm	
L	35 - 435
D	50
d	14,5
± 1,0	



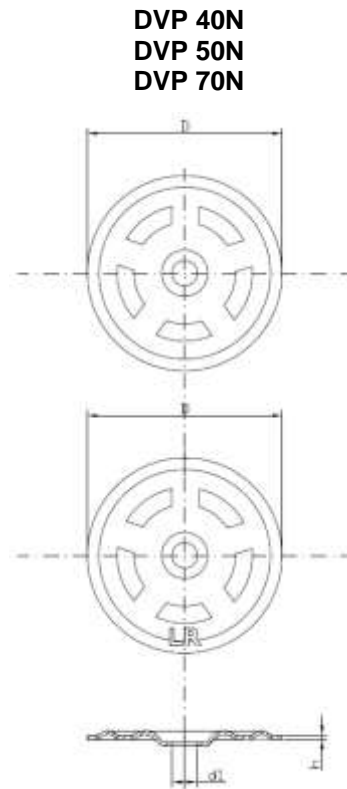
ETANCO Flat Roof Fasteners

Product description
G2

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Dimensions, mm		
d1	5,0; 6,5	± 0,2
D	50; 70	± 1
h	1,0	± 0,08



Dimensions, mm		
d1	5,0; 6,5	± 0,2
D	40; 50; 70	± 1
h	1,0	± 0,08

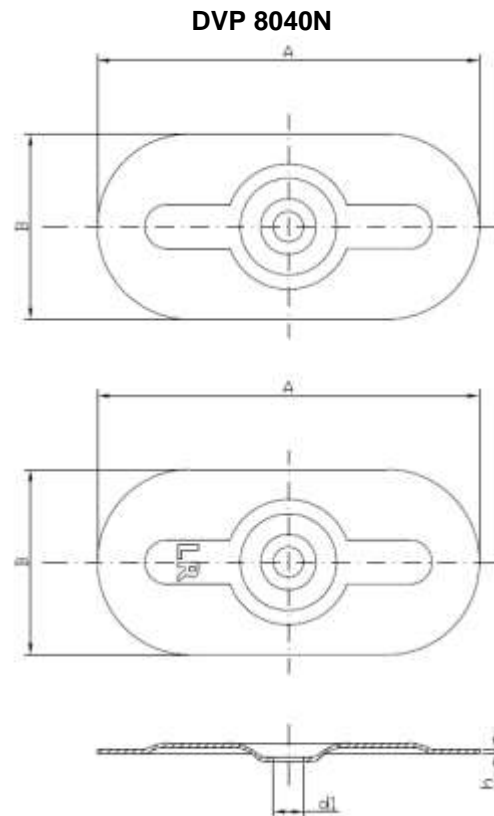
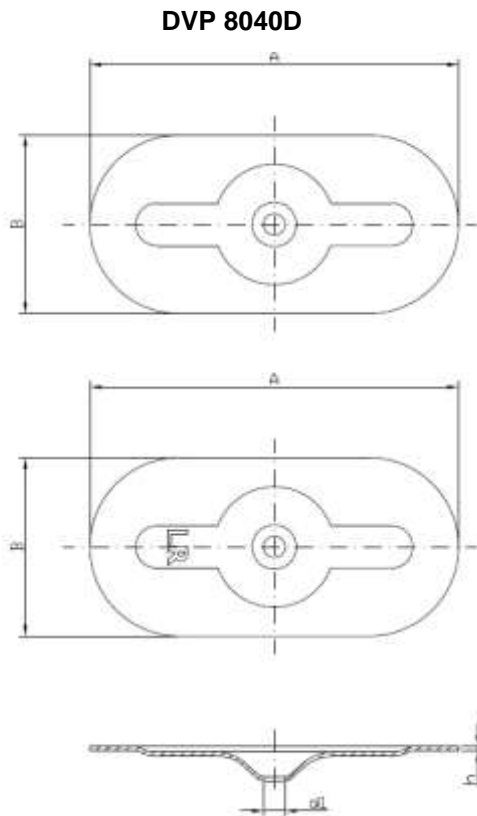
ETANCO Flat Roof Fasteners

Product description

DVP 50, DVP 70, DVP 40N, DVP 50N, DVP 70N

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Dimensions, mm		
d1	5,0; 6,5	± 0,2
A	80	± 1
B	40	
h	1,00	± 0,08

Dimensions, mm		
d1	5,0; 6,5	± 0,2
A	80	± 1
B	40	
h	1,00	± 0,08

ETANCO Flat Roof Fasteners
Product description DVP 8040D, DVP 8040N

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<p>GTS-S 4,8 × L</p> <p>GTS-B 4,8 × L</p>							
<p>TORX 25 PH2 TORX 25</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 30px;">L1</td> <td style="width: 30px;">45 - 80</td> <td style="width: 30px;"></td> </tr> </table>	L1	45 - 80		<p>TORX 25 PH2 TORX 25</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 30px;">L1</td> <td style="width: 30px;">45 - 50</td> <td style="width: 30px;"></td> </tr> </table>	L1	45 - 50	
L1	45 - 80						
L1	45 - 50						
<p>ETANCO Flat Roof Fasteners</p>		<p>Annex A5</p>					
<p>Product description</p> <p>GTS-S 4,8 × L, GTS-B 4,8 × L</p>		<p>of European Technical Assessment ETA-12/0149</p>					

GTSX-B 4,8 × L

GTS-BZT 4,8 × L

GTHD 6,3 × L

TORX 25 PH2

TORX 25

GT
ET
LR
SW 8

TORX 25

Dimensions, mm		
L	50 - 300	± 1
L1	45 - 50	

Dimensions, mm		
L	60 - 300	± 1
L1	60	
L2	8	

Dimensions, mm		
L	60 - 300	± 1
L1	30 - 60	

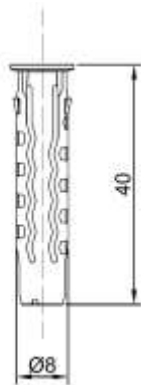
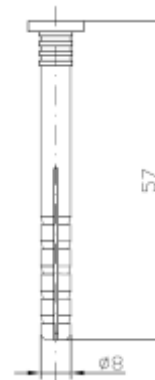
ETANCO Flat Roof Fasteners

Product description

GTSX-B 4,8 × L, GTS-BZT 4,8 × L, GTHD 6,3 × L

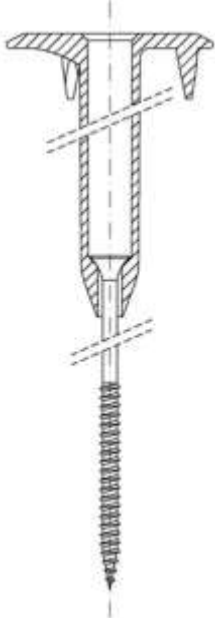
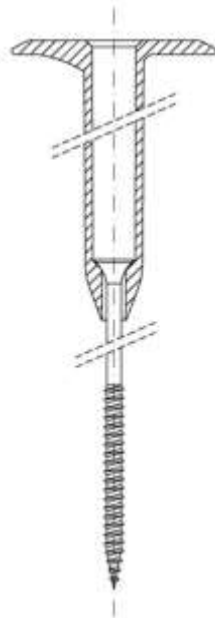

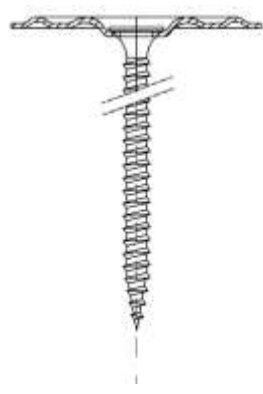
Annex A6

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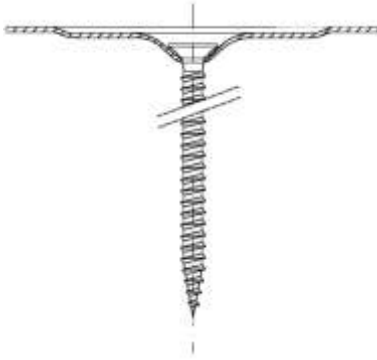
MQ 8 × 40**UZ-K 8 × 57****ETANCO Flat Roof Fasteners****Product description**

MQ 8 × 40, UZ-K 8 × 57

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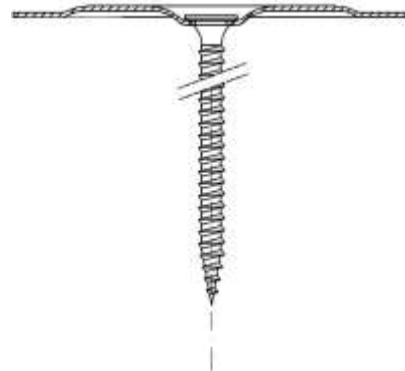
<p>1.</p>  <p>GTS-S 4,8 x L and G1 50 x L</p>	<p>2.</p>  <p>GTS-S 4,8 x L and G2 50 x L</p>	
<p>3.</p>  <p>GTS-S 4,8 x L and DVP 50 or DVP 70</p>	<p>4.</p>  <p>GTS-S 4,8 x L and DVP 40N, DVP 50N or DVP 70N</p>	
<p>ETANCO Flat Roof Fasteners</p>		<p>Annex A8 of European Technical Assessment ETA-12/0149</p>
<p>Product description ETANCO Flat Roof Fasteners No. 1, 2, 3 and 4</p>		

5.



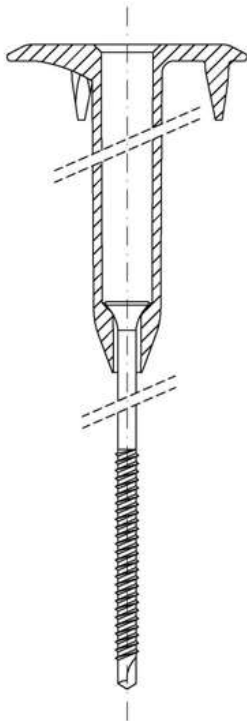
GTS-S 4,8 x L and DVP 8040D

6.



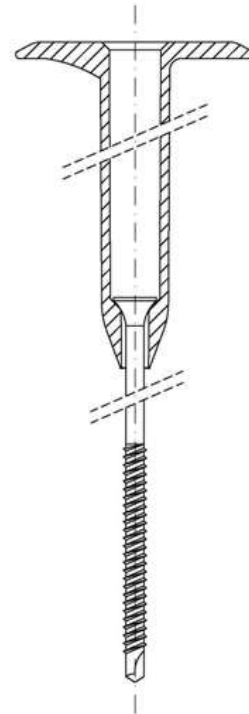
GTS-S 4,8 x L and DVP 8040N

7.



GTS-B 4,8 x L and G1 50 x L

8.



GTS-B 4,8 x L and G2 50 x L

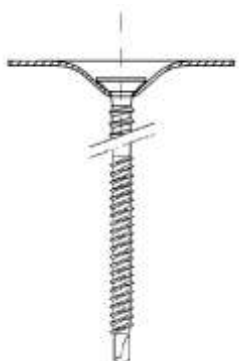
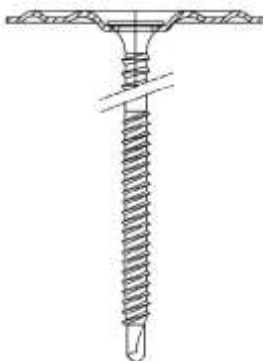
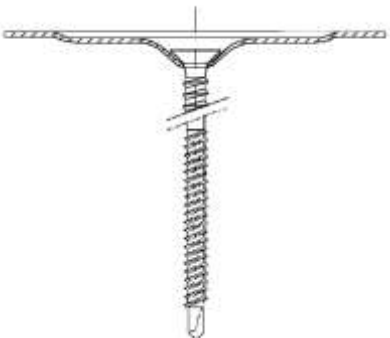
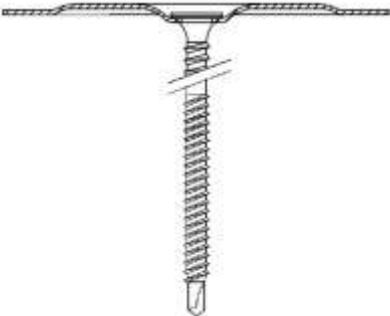
ETANCO Flat Roof Fasteners

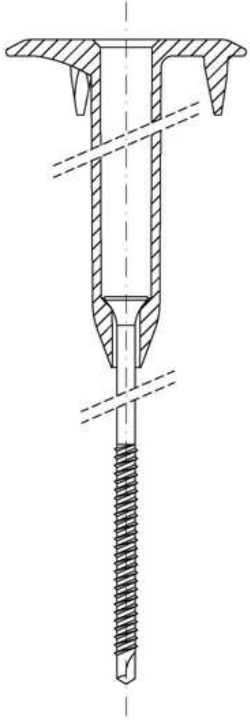
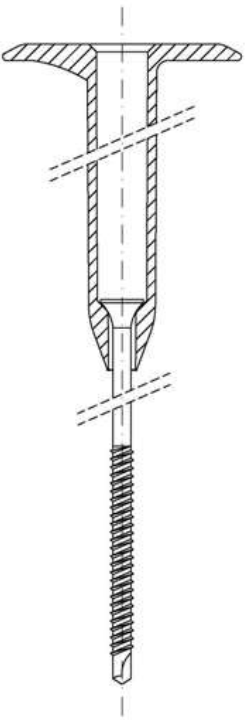
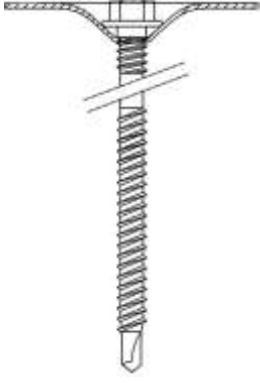
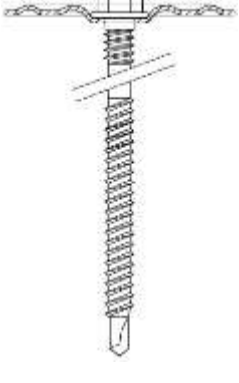
Product description

ETANCO Flat Roof Fasteners No. 5, 6, 7 and 8

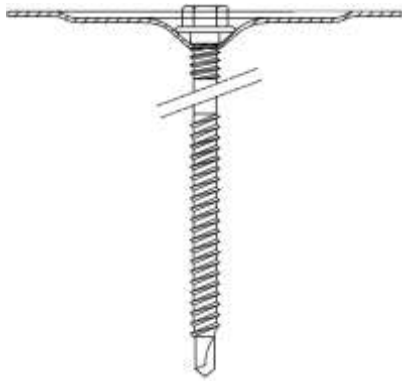
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<p>9.</p>  <p>GTS-B 4,8 x L and DVP 50 or DVP 70</p>	<p>10.</p>  <p>GTS-B 4,8 x L and DVP 40N, DVP 50N or DVP 70N</p>
<p>11.</p>  <p>GTS-B 4,8 x L and DVP 8040D</p>	<p>12.</p>  <p>GTS-B 4,8 x L and DVP 8040N</p>
<p>ETANCO Flat Roof Fasteners</p>	
<p>Product description ETANCO Flat Roof Fasteners No. 9, 10, 11 and 12</p>	<p>Annex A10 of European Technical Assessment ETA-12/0149</p>

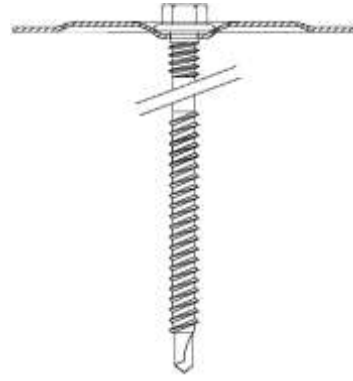
<p>13.</p>  <p>GTSX-B 4,8 x L and G1 50 x L</p>	<p>14.</p>  <p>GTSX-B 4,8 x L and G2 50 x L</p>
<p>15.</p>  <p>GTS-BZT 4,8 x L and DVP 50 or DVP 70</p>	<p>16.</p>  <p>GTS-BZT 4,8 x L and DVP 40N, DVP 50N or DVP 70N</p>
<p>ETANCO Flat Roof Fasteners</p>	
<p>Product description ETANCO Flat Roof Fasteners No. 13, 14, 15 and 16</p>	<p>Annex A11 of European Technical Assessment ETA-12/0149</p>

17.



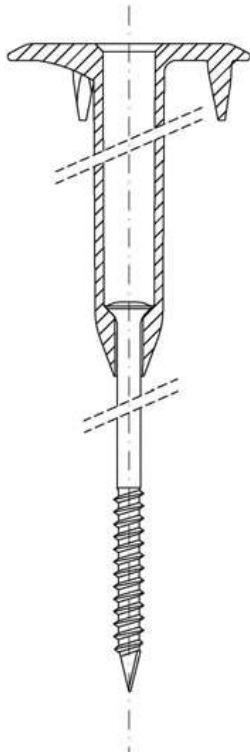
GTS-BZT 4,8 x L and DVP 8040D

18.



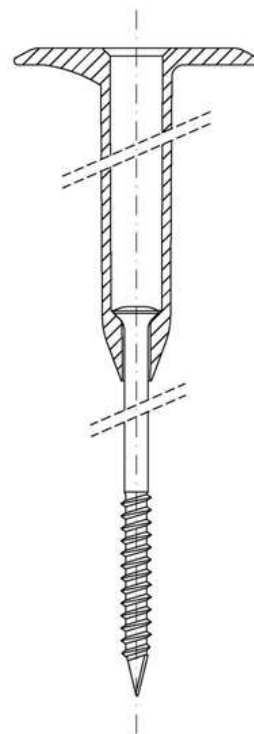
GTS-BZT 4,8 x L and DVP 8040N

19.



GTHD 6,3 x L and G1 50 x L

20.



GTHD 6,3 x L and G2 50 x L

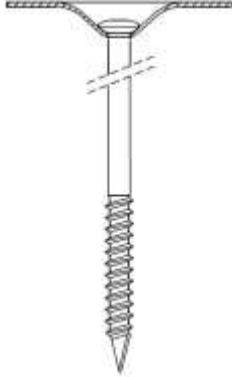
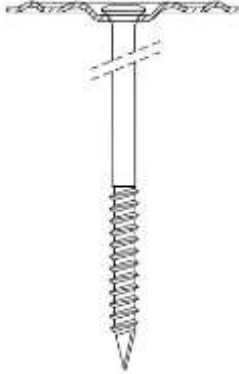
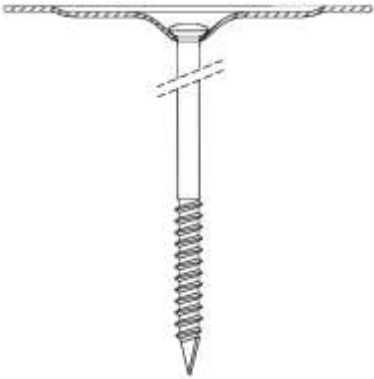
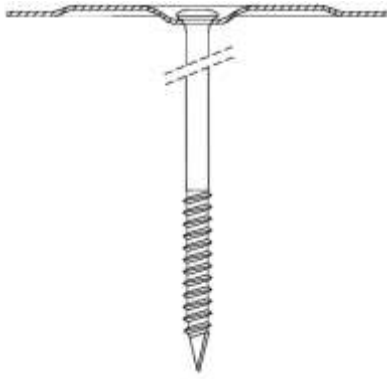
ETANCO Flat Roof Fasteners

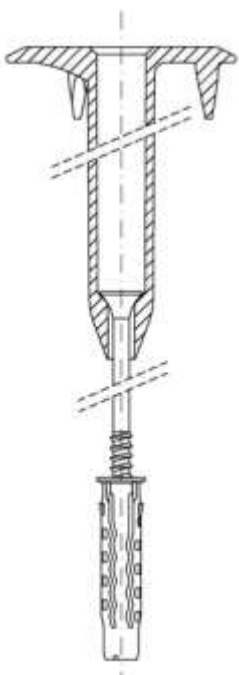
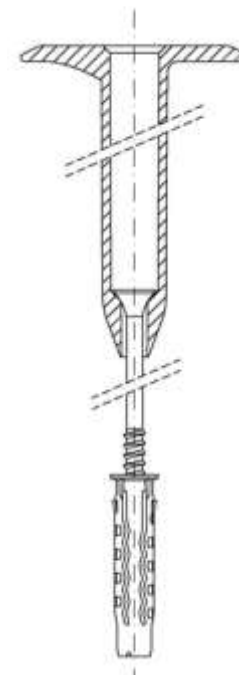
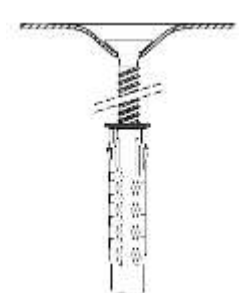
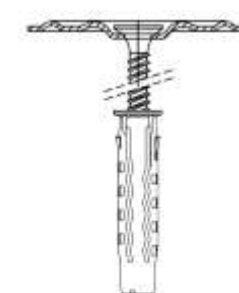
Product description

ETANCO Flat Roof Fasteners No. 17, 18, 19 and 20

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<p>21.</p>  <p>GTHD 6,3 x L and DVP 50 or DVP 70</p>	<p>22.</p>  <p>GTHD 6,3 x L and DVP 40N, DVP 50N or DVP 70N</p>	
<p>23.</p>  <p>GTHD 6,3 x L and DVP 8040D</p>	<p>24.</p>  <p>GTHD 6,3 x L and DVP 8040N</p>	
<p>ETANCO Flat Roof Fasteners</p>		<p>Annex A13 of European Technical Assessment ETA-12/0149</p>
<p>Product description ETANCO Flat Roof Fasteners No. 21, 22, 23 and 24</p>		

<p>25.</p>  <p>GTS-S 4,8 x L, MQ 8 x 40 and G1 50 x L</p>	<p>26.</p>  <p>GTS-S 4,8 x L, MQ 8 x 40 and G2 50 x L</p>			
<p>27.</p>  <p>GTS-S 4,8 x L, MQ 8 x 40 and DVP 50 or DVP 70</p>	<p>28.</p>  <p>GTS-S 4,8 x L, MQ 8 x 40 and DVP 40N, DVP 50N or DVP 70N</p>			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;">ETANCO Flat Roof Fasteners</td> <td rowspan="2" style="text-align: center; vertical-align: middle; padding: 5px;">Annex A14 of European Technical Assessment ETA-12/0149</td> </tr> <tr> <td style="text-align: center; padding: 5px;">Product description ETANCO Flat Roof Fasteners No. 25, 26, 27 and 28</td> </tr> </table>		ETANCO Flat Roof Fasteners	Annex A14 of European Technical Assessment ETA-12/0149	Product description ETANCO Flat Roof Fasteners No. 25, 26, 27 and 28
ETANCO Flat Roof Fasteners	Annex A14 of European Technical Assessment ETA-12/0149			
Product description ETANCO Flat Roof Fasteners No. 25, 26, 27 and 28				

29.



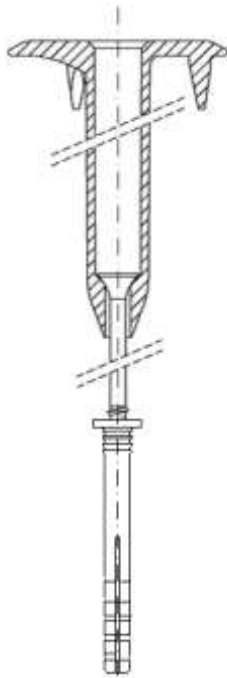
GTS-S 4,8 x L, MQ 8 x 40 and DVP 8040D

30.



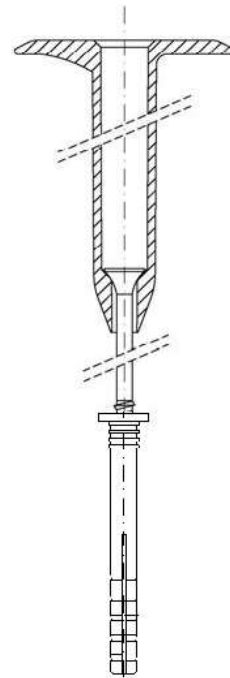
GTS-S 4,8 x L, MQ 8 x 40 and DVP 8040N

31.



GTS-S 4,8 x L, UZ-K 8 x 57 and G1 50 x L

32.



GTS-S 4,8 x L, UZ-K 8 x 57 and G2 50 x L

ETANCO Flat Roof Fasteners

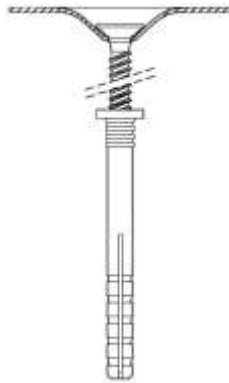
Product description

ETANCO Flat Roof Fasteners No. 29, 30, 31 and 32

Annex A15

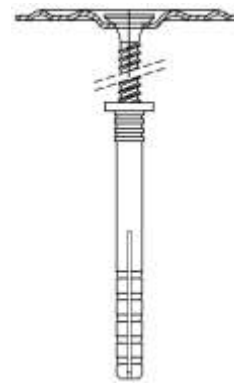
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33.



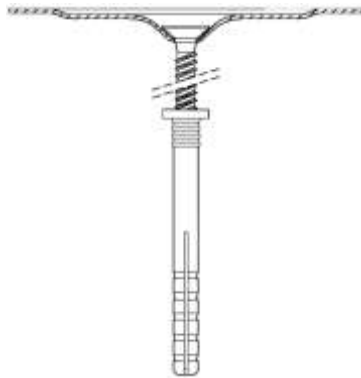
GTS-S 4,8 x L, UZ-K 8 x 57
and DVP 50 or DVP 70

34.



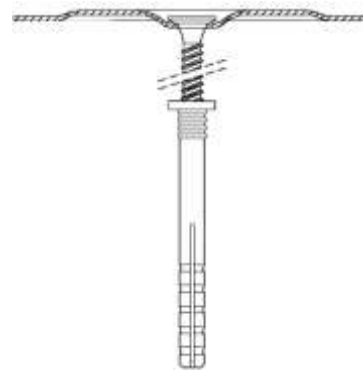
GTS-S 4,8 x L, UZ-K 8 x 57
and DVP 40N, DVP 50N or DVP 70N

35.



GTS-S 4,8 x L, UZ-K 8 x 57
and DVP 8040D

36.



GTS-S 4,8 x L, UZ-K 8 x 57 and DVP 8040N

ETANCO Flat Roof Fasteners

Product description

ETANCO Flat Roof Fasteners No. 33, 34, 35 and 36

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Specifications of intended use**Anchorage subject to:**

- Fastening of flexible roof waterproofing membranes according to EAD 030351-00-0402.

Base materials:

- Steel sheets
- Reinforced or unreinforced normal weight concrete
- Fibre-cement profiled sheets
- Timber structures
- OSB sheets

Installation:

- The installation is carried out according to the manufacturer's instructions. The manufacturer hands over the assembly instructions to the assembler.
- The conformity of the installed fasteners with this ETA is attested by the executing company.

ETANCO Flat Roof Fasteners	Annex B
Intended use Specification	of European Technical Assessment ETA-12/0149

Steel sheet S280GD according to EN 10346									
ETANCO Flat Roof Fasteners			Characteristic values of axial load resistance, R_k [kN] (depends on thickness of steel sheet, t [mm])						
No.	Fastener	Washer	$\geq 0,50$	$\geq 0,63$	$\geq 0,70$	$\geq 0,75$	$\geq 0,88$	$\geq 1,00$	$\geq 1,25$
1, 2	GTS-S 4,8xL	G1, G2	0,72	0,97	0,97	1,13	1,18	1,18	1,18
3 - 6		DVP	0,72	0,97	0,97	1,13	1,18	1,18	1,18
7, 8	GTS-B 4,8xL	G1, G2	-	-	1,08	1,08	1,11	1,59	1,59
9 - 12		DVP	-	-	1,08	1,08	1,11	1,59	1,59
13, 14	GTSX-B 4,8xL	G1, G2	-	-	-	0,82	1,06	1,46	1,46
15 - 18	GTS-BZT 4,8xL	DVP	-	-	-	1,01	1,11	1,59	1,59

Concrete according to EN 206						
ETANCO Flat Roof Fasteners			Characteristic values of axial load resistance, R_k [kN]		Embedment depth [mm]	Drill hole diameter [mm]
No.	Fastener	Washer	$\geq C12/15$	$\geq C20/25$		
19, 20	GTHD 6,3xL	G1, G2	1,58	1,58	30	5,0
21 - 24		DVP	1,58	1,58	30	5,0
25, 26	GTS-S 4,8xL MQ 8x40	G1, G2	1,13	1,13	40	8,0
27 - 30		DVP	1,13	1,13	40	8,0
31, 32	GTS-S 4,8xL U-ZK 8x57	G1, G2	1,13	1,13	60	8,0
33 - 36		DVP	1,13	1,13	60	8,0

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Characteristic values of axial load resistance	

Fibre-cement profiled sheets according to EN 494					
ETANCO Flat Roof Fasteners			Characteristic values of axial load resistance, R_k [kN]	Embedment depth (thickness of fibre-cement profiled sheets) [mm]	Drill hole diameter [mm]
No.	Fastener	Washer			
19, 20	GTHD 6,3xL	G1, G2	1,58	5	5,0
21 - 24		DVP	1,58	5	5,0
1, 2	GTS-S 4,8xL	G1, G2	0,77	5	4,0
3 - 6		DVP	0,77	5	4,0

Timber structures – wood class \geq C24 according to EN 14081-1					
ETANCO Flat Roof Fasteners			Characteristic values of axial load resistance, R_k [kN]	Embedment depth [mm]	
No.	Fastener	Washer			
19, 20	GTHD 6,3xL	G1, G2	1,58	30	
21 - 24		DVP	1,58	30	
1, 2	GTS-S 4,8xL	G1, G2	1,57	20	
3 - 6		DVP	1,57	20	

OSB sheets according to EN 300, density \geq 625 kg/m ³					
ETANCO Flat Roof Fasteners			Characteristic values of axial load resistance, R_k [kN]	Embedment depth (thickness of OSB) [mm]	
No.	Fastener	Washer			
19, 20	GTHD 6,3xL	G1, G2	1,58	18	
21 - 24		DVP	1,58	18	
1, 2	GTS-S 4,8xL	G1, G2	1,57	18	
3 - 6		DVP	1,57	18	

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Characteristic values of axial load resistance	