

**Declaration of Performance**  
DoP SLVT-en



1. Product type: SLVT: Heavy duty anchor

2. Identification

Product code	Length [mm]	Metric [mm]	Outer diameter [mm]	Fixture thickness [mm]
SLVT08100	100	M8	12	20
SLVT08120	120			40
SLVT10110	110	M10	15	20
SLVT10130	130			40
SLVT12130	130	M12	18	25
SLVT12160	160			55
SLVT16150	150	M16	24	25
SLVT16180	180			55
SLVT20160	160	M20	28	2
SLVT20190	190			30
SLVT20220	220			60
SLVT24210	210	M24	32	30
SLVT24240	240			60

3. Intended use: Generic type: Torque controlled anchor sleeve type  
 Base material: Non cracked concrete C20/25 according to EN 206-1.  
 Material: Made of steel, zinc plated ISO 4042 A2K  
 Durability: Internal dry conditions  
 Loading: Static, quasi static loads  
 Fire resistance: Non declared performance  
 Assumed working life: 50 years

4. Manufacturer: Index Fixing Systems. Técnicas Expansivas S.L.  
 Segador, 13  
 26006 Logroño, La Rioja, SPAIN

5. Authorised representative: Not applicable

6. System of assessment of performance: 1

7. Harmonised standard: Not applicable

8. European technical assessment: Tech. assessment body: IETcc; Instituto Eduardo Torroja de ciencias de la construcción.  
 Notified body 1219.  
 issued: ETA 04/0100  
 on the basis of: ETAG 001, part 1, 2  
 performed: Determination of product type, initial inspection of the manufacturing plant and continuous surveillance of FPC  
 under system: 1  
 and issued: EVCP certificate 1219-CPR-0001

9. Declared performances:

Essential characteristics			Performance						Harmonized technical specification
			M8	M10	M12	M16	M20	M24	
<b>Installation parameters</b>									ETAG001 p1/2
d <sub>o</sub>	Nominal diameter of drill bit:	[mm]	12	15	18	24	28	32	
h <sub>ef</sub>	Effective embedment depth:	[mm]	70	76.5	89	106	140.5	155	
d <sub>f</sub>	Fixture clearance hole diameter:	[mm]	14	17	20	26	31	35	
T <sub>inst</sub>	Nominal installation torque:	[Nm]	25	50	80	120	200	230	
h <sub>1</sub>	Depth of drilled hole:	[mm]	90	100	115	140	175	195	
h <sub>nom</sub>	Minimum installation depth:	[mm]	78	87.5	102	122	156	175	
h <sub>min</sub>	Minimum thickness of concrete member:	[mm]	140	155	180	215	285	310	
s <sub>min</sub>	Minimum spacing:	[mm]	100	160	240	240	300	300	
c <sub>min</sub>	Minimum edge distance:	[mm]	60	70	80	100	150	150	
<b>Tension load: steel failure</b>									ETAG001 p1/2
N <sub>Rk,s</sub>	Tension steel characteristic resistance:	[kN]	29.3	46.4	67.4	125.6	203.4	293.0	
γ <sub>Ms</sub>	Partial safety factor:	[-]	1.5	1.5	1.5	1.5	1.5	1.5	
<b>Tension load: pull-out failure in concrete C20/25</b>									ETAG001 p1/2
N <sub>Rk,p</sub>	Tension characteristic resistance:	[kN]	Not decisive	Not decisive	Not decisive	Not decisive	Not decisive	Not decisive	
γ <sub>Mp</sub>	Partial safety factor: <sup>1)</sup>	[-]	-	-	-	-	-	-	
<b>Tension load: concrete cone or splitting failure in concrete C20/25</b>									ETAG001 p1/2
S <sub>cr,N</sub>	Critical spacing:	[mm]	210.0	229.5	267.0	318.0	421.5	465.0	
S <sub>cr,sp</sub>	Critical spacing (splitting):	[mm]	420.0	459.0	534.0	636.0	843.0	930.0	
C <sub>cr,N</sub>	Critical edge distance:	[mm]	105.0	114.8	133.5	159.0	210.8	232.5	
C <sub>cr,sp</sub>	Critical edge distance (splitting):	[mm]	210.0	229.5	267.0	318.0	421.5	465.0	
γ <sub>Mc</sub>	Partial safety factor: <sup>1)</sup>	[-]	1.5	1.5	1.5	1.5	1.5	1.5	
<b>Displacements under tension loads</b>									ETAG001 p1/2
N	Service tension load:	[kN]	14.0	16.1	20.2	26.2	40.0	46.3	
δ <sub>N0</sub>	Short term displacement under tension loads:	[mm]	0.1	0.2	0.2	0.3	0.5	0.5	
δ <sub>N∞</sub>	Long term displacement under tension loads:	[mm]	0.2	0.2	0.3	0.3	0.5	0.5	
<b>Shear load: steel failure</b>									ETAG001 p1/2
V <sub>Rk,s</sub>	Shear steel characteristic resistance:	[kN]	21.9	48.7	78.3	76.4	112.1	129.3	
M <sup>0</sup> <sub>Rk,s</sub>	Characteristic bending moment:	[Nm]	30	60	105	266	519	898	
γ <sub>Ms</sub>	Partial safety factor:	[-]	1.25	1.25	1.25	1.25	1.25	1.25	
<b>Shear load: concrete pryout failure</b>									ETAG001 p1/2
K	K factor:	[-]	2.0	2.0	2.0	2.0	2.0	2.0	
γ <sub>Mpr</sub>	Partial safety factor:	[-]	1.5	1.5	1.5	1.5	1.5	1.5	
<b>Shear load: concrete edge failure</b>									ETAG001 p1/2
l <sub>f</sub>	Effective anchorage depth under shear loads:	[mm]	70	76.5	89	106	140.5	155	
d <sub>nom</sub>	Outside anchor diameter:	[mm]	12.0	15.0	18.0	24.0	28.0	32.0	
γ <sub>Mc</sub>	Partial safety factor:	[-]	1.5	1.5	1.5	1.5	1.5	1.5	
<b>Displacements under shear loads</b>									ETAG001,p1/2
V	Service shear load:	[kN]	12.5	27.8	40.3	43.7	64.1	73.9	
δ <sub>V0</sub>	Short term displacement under shear loads:	[mm]	1.5	2.0	3.4	4.9	5.2	5.4	
δ <sub>V∞</sub>	Long term displacement under shear loads:	[mm]	2.3	3.5	4.5	6.3	7.9	8.2	

1) In absence of other national regulations

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed on behalf of the manufacturer by:



Santiago Reig. Technical manager  
Logroño, 17.11.2014