

# Declaration of Performance

According to Annex III of the Regulation (EU) Nr.305/2011  
(Construction Products Regulation).

## Walraven Drop-in Anchor WDI2R

DoP No. 16/0783-WDI1

**1. Unique identification code of the product-type:**

Walraven Drop-in Anchor WDI1, Item numbers: 6103006, 6103008, 6103010, 6103012, 6103016  
Walraven Drop-in Anchor WDI1L, Item numbers: 6103106, 6103108, 6103110, 6103112, 6103116  
Walraven Drop-in Anchor WDI1 SSt, Item number: 6103708, 6103710, 6103712, 6103716

**2. Intended use/es:**

Metal anchors for use in concrete (light-duty type): for use in redundant systems for fixing and/or supporting to concrete elements, such as lightweight suspended ceilings, as well as installations.

**3. Manufacturer:**

J. van Walraven Holding B.V., Industrieweg 5, 3641 RK Mijdrecht, The Netherlands

**4. System/s of AVCP:**

System 2+

**5. European Assessment Document:** ETAG 001 Part 6 "Anchors for multiple use for non-structural applications" used as EAD, April 2013.

**European Technical Assessment:** ETA - 16/0783 (26/09/2016).

**Technical Assessment Body:** Instytut Techniki Budowlanej

**Notified body:** 1488.

**6. Declared performance/s:**

Essential Characteristic	Performance	Harmonized Technical Specification
<b>Mechanical resistance and stability (BWR 1)</b>		
Characteristic resistance for all load directions	See Annex C1 ETA-16/0783	ETAG 001 Part 6
Edge and spacing	See Annex C1 ETA-16/0783	ETAG 001 Part 6
<b>Safety in case of fire (BWR 2)</b>		
Resistance to fire	See Annex C2, ETA-16/0783	EOTA TR020
Reaction to Fire	Anchors satisfy requirements for Class A1	EN 13501-1

**7. Appropriate Technical Documentation and/or Specific Technical Documentation:**

N/A

8. The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

**Frank Nijdam**

Co-CEO

J. van Walraven Holding B.V.

Signature

A handwritten signature in black ink, consisting of several overlapping loops and strokes, positioned over the 'Signature' label.

Date 04-02-2025

Place: Mijdrecht

**Table C1:** Characteristic resistance - WDI1 DROP IN ANCHOR and WDI1L DROP IN ANCHOR LIPPED (design acc. to ETAG 001, Annex C, method C)

WDI1 DROP IN ANCHOR and WDI1L DROP IN ANCHOR LIPPED			Property class	M6	M8	M10	M12	M16	M20
All load directions (fastening screw or threaded rod property class $\geq 4.8$ )									
Characteristic resistance in cracked and non-cracked concrete C20/25 to C50/60	$F_{Rk}$	[kN]	$\geq 4.8$	1,52	3,01	4,57	6,43	13,31	17,38
Partial safety factor (installation safety factor $\gamma_2 = 1,4$ included)	$\gamma_M^1$	[-]	-	2,1					
Spacing	$s_{cr}$	[mm]		200				260	320
Edge distance	$c_{cr}$	[mm]		150				195	240
Shear load with lever arm									
Characteristic resistance	$M_{Rk,S}^0$	[Nm]	4.8	6	15	30	52	133	260
Characteristic resistance	$M_{Rk,S}^0$	[Nm]	5.8	8	19	37	66	167	325
Characteristic resistance	$M_{Rk,S}^0$	[Nm]	6.8	9	23	45	79	200	390
Characteristic resistance	$M_{Rk,S}^0$	[Nm]	8.8	12	30	60	105	267	520
Partial safety factor	$\gamma_{Ms}^1$	[-]	-	1,25					

<sup>1</sup> in the absence of other national regulations

<sup>2</sup> characteristic bending moment  $M_{Rk,S}^0$  for the equation (5.5) in ETAG 001, Annex C

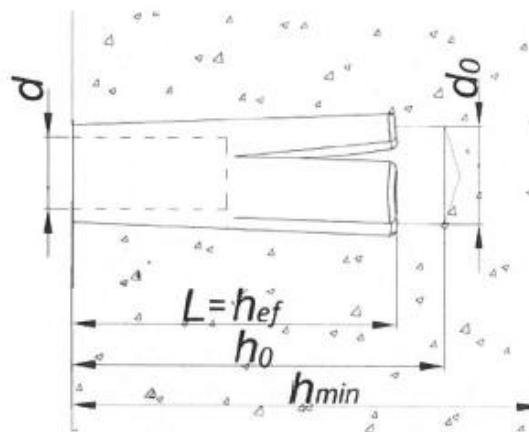
**Table C2:** Characteristic resistance - WDI1 SSt DROP IN ANCHOR (design acc. to ETAG 001, Annex C, method C)

WDI1 SSd DROP IN ANCHOR			Property class	M6	M8	M10	M12	M16	
All load directions (fastening screw or threaded rod property class A4-70)									
Characteristic resistance in cracked and non-cracked concrete C20/25 to C50/60	$F_{Rk}$	[kN]	A4-70	1,00	2,01	3,20	4,59	8,27	
Partial safety factor (installation safety factor $\gamma_2 = 1,4$ included)	$\gamma_M^1$	[-]	-	2,1					
Spacing	$s_{cr}$	[mm]		200					260
Edge distance	$c_{cr}$	[mm]		150					195
Shear load with lever arm									
Characteristic resistance	$M_{Rk,S}^0$	[Nm]	A4-70	11	26	52	92	233	
Partial safety factor	$\gamma_{Ms}^1$	[-]	-	1,25					

<sup>1</sup> in the absence of other national regulations

<sup>2</sup> characteristic bending moment  $M_{Rk,S}^0$  for the equation (5.5) in ETAG 001, Annex C

WDI1 DROP IN ANCHOR, WDI1L DROP IN ANCHOR LIPPED and WDI1 SSt DROP IN ANCHOR		Annex C1 of European Technical Assessment ETA-16/0783
Performances Characteristic resistance		



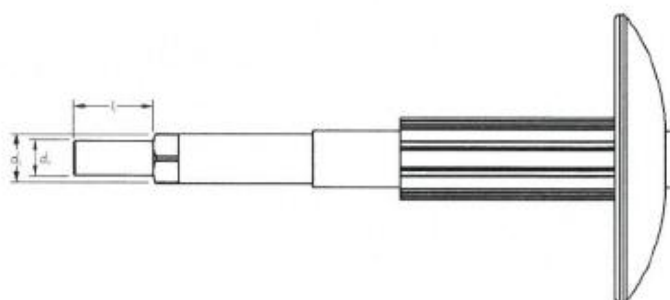
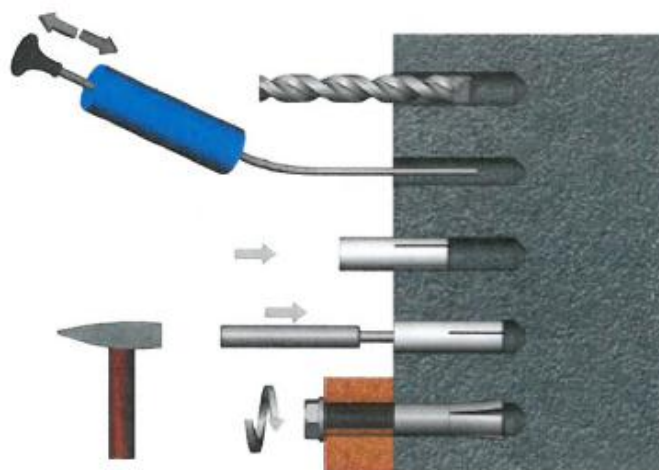
**Table B1:** Installation parameters

Anchor size	Effective anchorage depth	Drill hole depth	Drill hole diameter	Installation torque (max)	Thickness of concrete member (min)	Screwing depth (min)	Screwing depth (max)	Diameter of clearance hole in the fixture
	[mm]	[mm]	[mm]	[Nm]	[mm]	[mm]	[mm]	[mm]
	$h_{ef}$	$h_1$	$d_0$	max $T_{inst}$	$h_{min}$	$l_{s, min}$	$l_{s, max}$	$d_f$
M6	25	30	8	4,5	80	6	11	7
M8	30	32	10	11	80	8	13	9
M10	40	42	12	22	80	10	15	12
M12	50	53	15	38	100	12	20	14
M16	65	70	20	98	130	16	25	18
M20	80	85	25	130	160	20	35	22

**WDI1 DROP IN ANCHOR, WDI1L DROP IN ANCHOR LIPPED  
and WDI1 SSt DROP IN ANCHOR**

**Intended use**  
Installation parameters

**Annex B2**  
of European  
Technical Assessment  
ETA-16/0783



Installation tools		M6	M8	M10	M12	M16	M20
Diameter $d_4$	[mm]	5,0	6,6	8,3	10,2	13,5	16,8
Diameter $d_5$	[mm]	7,5	9,5	11,5	14,5	19,5	24,5
Length $l_2$	[mm]	14,8	18,0	23,0	28,0	33,0	47,0

<b>WDI1 DROP IN ANCHOR, WDI1L DROP IN ANCHOR LIPPED and WDI1 SSt DROP IN ANCHOR</b>	<b>Annex B3</b>  of European Technical Assessment ETA-16/0783
<b>Intended use</b> Installation instruction	



**Table C3:** Characteristic resistance under fire exposure in concrete C20/25 to C50/60 – WDI1 DROP IN ANCHOR and WDI1L DROP IN ANCHOR LIPPED (design acc. to ETAG 001, Annex C, method C)

Fire resistance class	WDI1 DROP IN ANCHOR and WDI1L DROP IN ANCHOR LIPPED	M8	M10	M12	M16	M20	
All load directions (fastening screw or threaded rod property class 4.8)							
R30	Characteristic resistance $F_{Rk,fi}$ <sup>1</sup>	[kN]	0,4	0,9	1,6	3,1	4,3
R60		[kN]	0,3	0,8	1,3	2,4	3,7
R90		[kN]	0,3	0,6	1,1	2,0	3,2
R120		[kN]	0,2	0,5	0,8	1,6	2,5
Spacing	$S_{cr,fi}$	[mm]	4 x $h_{ef}$				
Edge distance	$C_{cr,fi}$	[mm]	2 x $h_{ef}$				
The design method covers anchors with a fire attack from one side only. In case of fire attack from more than one side, the edge distance shall be $\geq 300$ mm.							

<sup>1</sup> in the absence of other national regulations a partial safety factor  $\gamma_{m,fi} = 1,0$  is recommended

**Table C4:** Characteristic resistance under fire exposure in concrete C20/25 to C50/60 – WDI1 SSt DROP IN ANCHOR (design acc. to ETAG 001, Annex C, method C)

Fire resistance class	WDI1 SSt DROP IN ANCHOR	M8	M10	M12	M16	
All load directions (fastening screw or threaded rod property class A4-70)						
R30	Characteristic resistance $F_{Rk,fi}$ <sup>1</sup>	[kN]	0,5	0,8	1,1	2,1
R60		[kN]	0,5	0,8	1,1	2,1
R90		[kN]	0,5	0,8	1,1	2,1
R120		[kN]	0,4	0,6	0,9	1,6
Spacing	$S_{cr,fi}$	[mm]	4 x $h_{ef}$			
Edge distance	$C_{cr,fi}$	[mm]	2 x $h_{ef}$			
The design method covers anchors with a fire attack from one side only. In case of fire attack from more than one side, the edge distance shall be $\geq 300$ mm.						

<sup>1</sup> in the absence of other national regulations a partial safety factor  $\gamma_{m,fi} = 1,0$  is recommended

<b>WDI1 DROP IN ANCHOR, WDI1L DROP IN ANCHOR LIPPED and WDI1 SSt DROP IN ANCHOR</b>	<b>Annex C2</b> of European Technical Assessment ETA-16/0783
<b>Performances</b> Characteristic resistance under fire exposure	