

DECLARATION OF PERFORMANCE

CONF-DOP_KON-01-22

No. H31-1090-1-2/1

1.	Unique identification code of the product-type	HALFEN Cantilever bracket KON		
2.	Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4)	HALFEN Cantilever bracket KON		
3.	Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:			
	Generic type and use	HALFEN Cantilever brackets KON are load-bearing steel components intended for connection to cast-in anchor channels or to welded /bolted framing channels resp. for fixing to concrete construction elements using site drilled bolts		
	Product size covered (anchor channels and corresponding screws)	KON 52/2	KON 41/1 KON 41/D KON 41/2 KON 41/V	KON 36/1 KON 36/2
	For use in	-		
	Anchor material / Screw material and intended use	KON 52/2: - Hot-dipped galvanized steel acc. to EN 10025-2 and HALFEN Material Specification , for internal conditions (environments) with normal humidity - Stainless steel acc. to EN 10088-5 also for medium to high corrosion exposure KON 41/1, 41/D, 41/2, 36/1, 36/2, 28/1: - Hot-dipped galvanized steel acc. to EN 10025-2, for internal conditions (environments) with normal humidity - Stainless steel acc. to EN 10088-2 and EN 1993-1-4, also for medium to high corrosion exposure		
	Loading	Static and quasi static loads		
4.	Name, registered trade name or registered trademark and contact address of the manufacturer as required pursuant to Article 11(5)	Leviat GmbH, Liebigstraße 14, 40764 Langenfeld, Germany		
5.	Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2)	-		
6.	System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V	System 2+		
7.	In case of the declaration of performance concerning a construction product covered by a harmonised standard	The notified body NB-no. 2499 has performed under system 2+: i) Initial inspection of the manufacturing plant and of factory production control ii) Continuous surveillance, assessment and evaluation of factory production control and issued the following certificates: - Certificate of conformity 2499-CPR-0113070-00-xx relating to factory production and structural design work - Welding certificate SCH 0113070-00-xx Certificate of Quality System acc. to ISO 3834-2		

DECLARATION OF PERFORMANCE

CONF-DOP_KON-01-22

No. H31-1090-1-2/1

8.	In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued	-	
9.	Declared performance		
	Essential Characteristics	Performance	Harmonized Technical Specification
	Tolerances	According to component specification and EN 1090-2	
	Weldability	S235JR, S275JR acc. to EN 10025-2; Stainless steel acc. to EN 10088-5 und Z-30.3-6	
	Fracture toughness	NPD	
	Reaction to fire	NPD	
	Release of cadmium	NPD	
	Emission of radioactivity	NPD	
	Durability	Surface preparation according to EN 1090-2; Stainless steel identified in point 3 or corrosion protection through hot-dipped galvanizing acc. to EN ISO 1461	
	Design value of load bearing capacity	Design according to EN 1993-1-1:2005 + AC:2009, See Table 1 - 7	
	Deformation at the serviceability limit state	Deflection $\leq l/150$, Design according EN 1993-1-1:2005 + AC:2009	
	Where pursuant to Article 37 or 38 in the Specific Technical Documentation has been used, the requirements with which the product complies:		-
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.			

DECLARATION OF PERFORMANCE

CONF-DOP_KON-01-22

No. H31-1090-1-2/1

Table 1

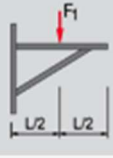
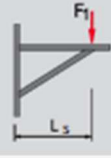
Cantilever bracket KON 52/2			Load bearing capacities F_{Rd} [kN] acc. to EN 1993-1 KON 52/2		
Dimensions					
Length L	Height H	Length Ls	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$
[mm]	[mm]	[mm]			
500	450	330	12,80	21,00	10,50
600	475	380	11,20	21,00	10,50
700	500	430	9,80	21,00	9,10
800	550	480	8,40	21,00	8,40
900	600	530	7,70	21,00	7,70
1000	650	630	7,00	21,00	7,00
1100	700	730	6,30	19,60	6,30

Table 2

Cantilever bracket KON 41/1			Load bearing capacities F_{Rd} [kN] acc. to EN 1993-1 KON 41/1			
Dimensions						
Length L	Height H	Length Ls	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
[mm]	[mm]	[mm]				
175	70	115	7,49	3,71	3,71	2,45
325	70	215	3,71	1,82	1,82	1,19
475	70	315	2,45	1,19	1,19	0,77

DECLARATION OF PERFORMANCE

CONF-DOP_KON-01-22

No. H31-1090-1-2/1

Table 3

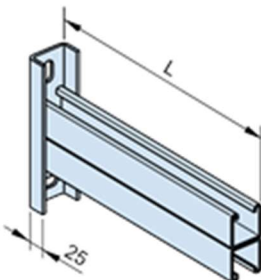
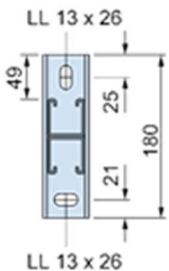
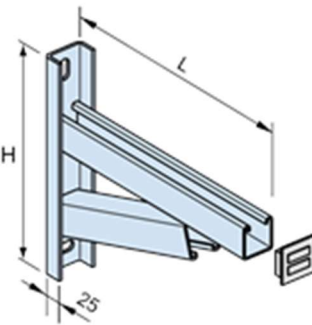
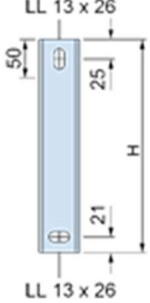
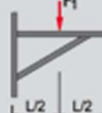
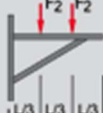
Cantilever bracket KON 41/D		Load bearing capacities F_{Rd} [kN] acc. to EN 1993-1 KON 41/D			
					
		$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
		325	7,84	3,92	2,59
		475	5,18	2,59	1,88
		625	3,92	1,96	1,28

Table 4

Cantilever bracket KON 41/2		Load bearing capacities F_{Rd} [kN] acc. to EN 1993-1 KON 41/2			
					
		$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
		325	270	10,50	6,88
		475	330	7,00	6,65
		625	380	4,90	4,90
		775	430	3,71	3,71

DECLARATION OF PERFORMANCE

CONF-DOP_KON-01-22

No. H31-1090-1-2/1

Table 5

Cantilever bracket KON 36/1

Load bearing capacities F_{Rd} [kN] acc. to EN 1993-1 KON 36/1

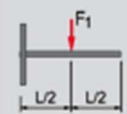
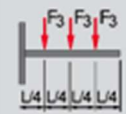
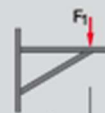
Length L [mm]				
	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
300	2,8	1,4	1,4	0,98
400	2,1	1,05	1,05	0,7
500	1,68	0,84	0,84	0,56
600	1,4	0,7	0,7	0,48

Table 6

Cantilever bracket KON 36/2

Load bearing capacities F_{Rd} [kN] acc. to EN 1993-1 KON 36/2

Length L [mm]				
	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
300	7,00	4,40	5,00	3,30
400	5,80	3,85	4,40	2,95
500	4,40	3,80	3,50	2,30
600	3,80	3,50	2,80	1,80
700	2,95	3,50	2,30	1,55

DECLARATION OF PERFORMANCE

CONF-DOP_KON-01-22

No. H31-1090-1-2/1

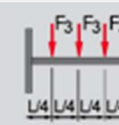
Table 7

Cantilever bracket KON 28/1

Technical drawing of the cantilever bracket. The main view shows a side profile with a mounting plate of width 40 mm and thickness 6 mm. The bracket arm has a length L. A detail view shows the end of the arm, which is a channel profile (LL 13 x 20) with a total height of 120 mm. The mounting plate is 46 mm high, and the channel profile has a top flange of 25 mm and a bottom flange of 21 mm.

Technical drawing of the channel profile. The main view shows a side profile with a total height of 120 mm. The mounting plate is 46 mm high, and the channel profile has a top flange of 25 mm and a bottom flange of 21 mm. The detail view shows the end of the arm, which is a channel profile (LL 13 x 20) with a total height of 120 mm.

Load bearing capacities F_{Rd} [kN] acc. to EN 1993-1 KON 28/1

Length L [mm]				
	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
100	3,78	1,89	1,89	1,26
200	1,89	0,95	0,95	0,63
300	1,26	0,63	0,63	0,42
400	0,98	0,49	0,49	0,28

Langenfeld, 02.01.2022

Signed for and on behalf of the manufacturer by



Chris Oberli
(Managing Director | Europe Central)



Dr. Ing. Dirk Albartus
(Prokurist)