DECLARATION OF PERFORMANCE **CONF-DOP_KON 08/14-E**
HALFEN Cantilever bracket KON No. H31-1090-1-2/1

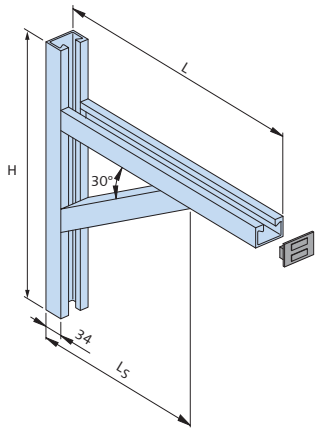
1.	Unique identification code of the product-type	**HALFEN Cantilever bracket KON**			
2.	Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4)	**HALFEN Cantilever bracket KON**			
3.	Intended use or uses of the construction 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	KON 52/2	KON 41/1 KON 41/D KON 41/2	KON 36/1 KON 36/2	KON 28/1
	For use in	-			
	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, 28/2: - Hot-dipped galvanized steel acc. to EN 10025-2, for internal conditions (environments) with normal humidity - Stainless steel acc. to EN 10088-2 and Z-30.3-6, also for medium to high corrosion exposure			
	Loading	Static and quasi static loads			
4.	Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5)	HALFEN 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			
8.	In case of the declaration of performance concerning a construction product for which a European Technical	-			

<table>
<tr><td></td><td colspan="2">Assessment has been issued</td><td></td></tr>
<tr><td rowspan="11">9.</td><td colspan="3">Declared performance</td></tr>
<tr><td>Essential Characteristics</td><td>Performance</td><td>Harmonized Technical Specification</td></tr>
<tr><td>Tolerances</td><td>According to component specification and EN 1090-2</td><td rowspan="9">EN 1090-1:2009 + A1:2011</td></tr>
<tr><td>Weldability</td><td>S235JR, S275JR acc. to EN 10025-2;
Stainless steel acc. to EN 10088-5 und Z-30.3-6</td></tr>
<tr><td>Fracture toughness</td><td>NPD</td></tr>
<tr><td>Reaction to fire</td><td>NPD</td></tr>
<tr><td>Release of cadmium</td><td>NPD</td></tr>
<tr><td>Emission of radioactivity</td><td>NPD</td></tr>
<tr><td>Durability</td><td>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 and DAST-Guideline 22</td></tr>
<tr><td>Design value of load bearing capacity</td><td>Design according to EN 1993-1-1:2005 + AC:2009,
See Table 1 - 7</td></tr>
<tr><td>Deformation at the serviceability limit state</td><td>Deflection ≤ l/150,
Design according EN 1993-1-1:2005 + AC:2009</td></tr>
<tr><td colspan="2">Where pursuant to Article 37 or 38 in the Specific Technical Documentation has been used, the requirements with which the product complies</td><td>-</td></tr>
<tr><td>10.</td><td colspan="3">The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.</td></tr>
<tr><td colspan="4">This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.</td></tr>
</table>

HALFEN
YOUR BEST CONNECTIONS

Table 1

Cantilever bracket KON 52/2



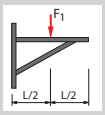
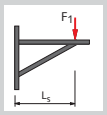
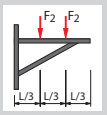
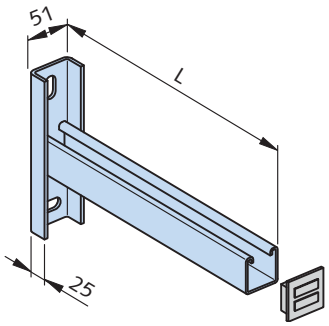
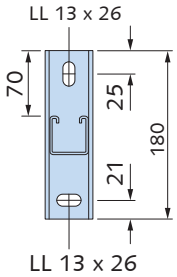
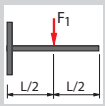
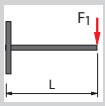
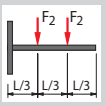
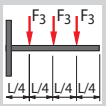
Load bearing capacities F_{Rd} acc. to EN 1993-1 KON 52/2					
Dimensions					
Length L [mm]	Height H [mm]	Length L_S [mm]	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$
500	450	330	12.6	21.0	10.5
600	475	380	11.2	21.0	10.5
700	500	430	9.8	21.0	9.1
800	550	480	8.4	21.0	8.4
900	600	530	7.7	21.0	7.7
1000	650	630	7.0	21.0	7.0
1100	700	730	6.3	19.6	6.3

Table 2

Cantilever bracket KON 41/1



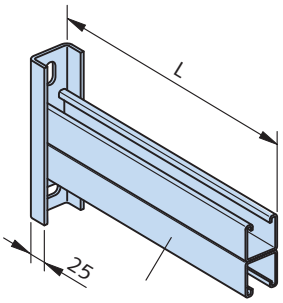


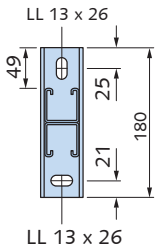
Load bearing capacities F_{Rd} acc. to EN 1993-1 KON 41/1				
Length L				
[mm]	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
175	7.49	3.71	3.71	2.45
325	3.71	1.82	1.82	1.19
475	2.45	1.19	1.19	0.77

HALFEN
YOUR BEST CONNECTIONS

Table 3

Cantilever bracket KON 41/D





Load bearing capacities F_{Rd} acc. to EN 1993-1 KON 41/D

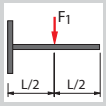
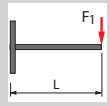
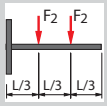
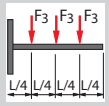
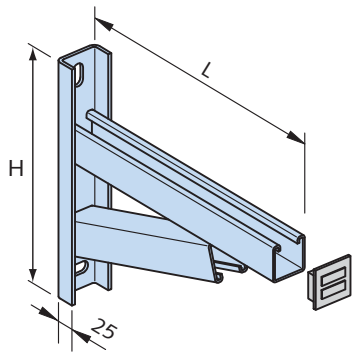
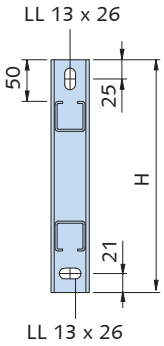
Length L [mm]	 $F_{1,Rd}$	 $F_{1,Rd}$	 $F_{2,Rd}$	 $F_{3,Rd}$
325	7.84	3.92	3.92	2.59
475	5.18	2.59	2.59	1.68
625	3.92	1.96	1.96	1.26

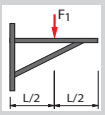
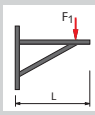
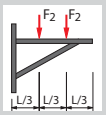
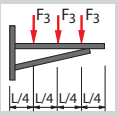
Table 4

Cantilever bracket KON 41/2





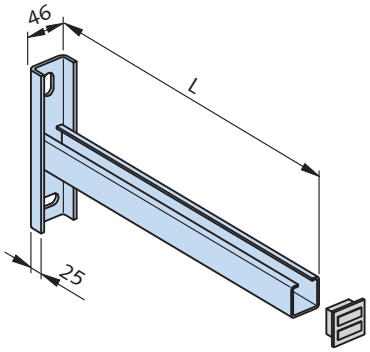
Load bearing capacities F_{Rd} acc. to EN 1993-1 KON 41/2

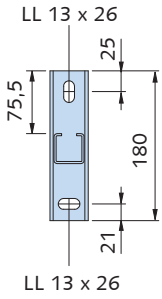
Dimensions [mm]					
Length L	Height H	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
325	270	10,50	6,86	6,72	4,76
475	330	7,00	6,65	5,18	3,43
625	380	4,90	4,90	3,85	2,59
775	430	3,71	3,71	2,87	1,96

HALFEN
YOUR BEST CONNECTIONS

Table 5

Cantilever bracket KON 36/1





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

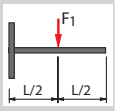
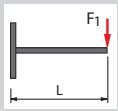
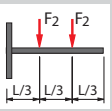
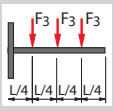
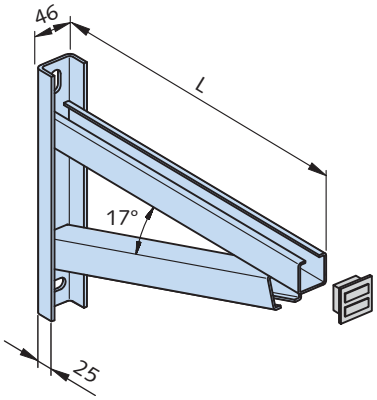
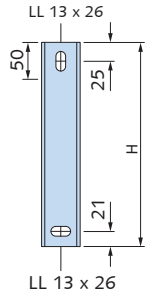
Length L [mm]				
	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
300	2.80	1.40	1.40	0.98
400	2.10	1.05	1.05	0.70
500	1.68	0.84	0.84	0.56
600	1.40	0.70	0.70	0.46

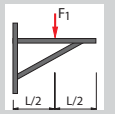
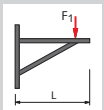
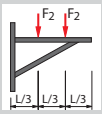
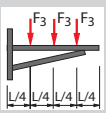
Table 6

Cantilever bracket KON 36/2





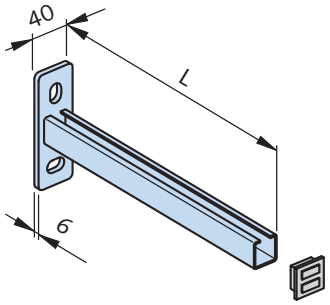
Load bearing capacities F_{Rd} acc. to EN 1993-1 KON 36/2

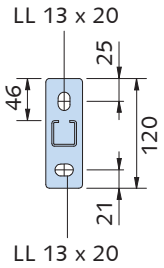
Länge L [mm]				
	$F_{1,Rd}$	$F_{1,Rd}$	$F_{2,Rd}$	$F_{3,Rd}$
300	7.0	4.4	5.0	3.0
400	5.8	3.85	4.4	2.95
500	4.4	3.8	3.5	2.3
600	3.6	3.5	2.8	1.8
700	2.95	3.5	2.3	1.55

HALFEN
YOUR BEST CONNECTIONS

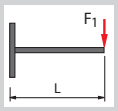
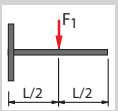
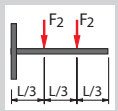
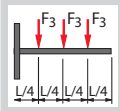
Table 7

Cantilever bracket KON 28/1





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

Length L [mm]				
	F_1	**F_1**	**F_2**	**F_3**
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, 26.08.15
Signed for and on behalf of the manufacturer by

Richard Wachter
(Managing Director)

ppa. Dr.-Ing. Dirk Albartus
(Manager Engineering)

HALFEN
YOUR BEST CONNECTIONS