

**DECLARATION OF PERFORMANCE**  
HALFEN HCC Column Shoe

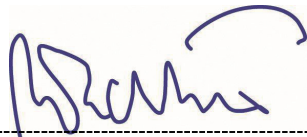
**CONF-DOP\_HCC 05/15-E**  
No. H60-1090-1-2

1.	Unique identification code of the product-type	<b>HALFEN Column Shoe HCC</b>
2.	Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4)	<b>Manufacturer code: H</b> <b>Type code and Product type: see label on packaging of the column shoe</b>
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 Column Shoes HCC are load-bearing connecting components (built-in components) intended for rigid joint connections or base restraints of precast reinforced concrete columns, simply supported or fixed configuration of connection with screw fastening to cast in HALFEN Anchor Bolts HAB
	Product size covered	Product size according to the load bearing capacity of the column shoes, see type test report No. 03/30 annex 2: HCC 16, HCC 20, HCC 24, HCC 30, HCC 39 HCC M30, HCC M36, HCC M39, HCC M45, HCC M52
	Base material / base material strength	Normal concrete of strength class C30/37 at minimum according to EN 206-1
	Material and scope of application	See type test report No. 03/30
	Loading	Predominantly static loading due to tensile and compression forces $N_{Ed}$
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)	Not applicable
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	<p>The notified body NB-No. 2451 has performed in matters of factory production:</p> <ul style="list-style-type: none"> <li>• initial inspection of the manufacturing plant and factory production control,</li> <li>• continuous surveillance, assessment and evaluation of factory production control</li> </ul> <p>according to System 2+ and issued the following:</p> <ul style="list-style-type: none"> <li>• Certificate 2451-CPR-EN1090-2015.0327.001 (HALFEN Produkcja Sp. z o.o., Nowe Skalmierzyce, Poland)</li> </ul> <p>The notified body NB-No. 2499 has performed in matters of structural design work:</p> <ul style="list-style-type: none"> <li>• inspection and evaluation of the relevant equipment, competence of personnel and resources,</li> <li>• assessment of procedure for structural design including control procedures</li> </ul> <p>according to System 2+ and issued the following:</p> <ul style="list-style-type: none"> <li>• Certificate of conformity 2499-CPR-0113070-00-02 (Plant Langenfeld, Germany).</li> </ul>

8.	In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued	Not applicable, see Point 7	
9.	Declared performance		
	Essential Characteristics	Performance	Harmonized Technical Specification
	Tolerances on dimensions and shape	Tolerances according to the component specification and EN 1090-2	EN 1090-1:2009+A1:2011
	Weldability	NPD	
	Fracture toughness/ impact resistance	27J at -20°C	
	Reaction to fire	Class A1 acc. to EN 13501-1	
	Release of cadmium and its compounds	NPD	
	Radioactivity	NPD	
	Durability	NPD	
	Load bearing capacity	Design according to EN 1993-1-1:2005+AC:2009, see type test report No. 03/30. The specified NDP for Germany apply.	
	Fatigue strength	NPD	
	Resistance to fire	NPD	
Manufacturing	According to the component specification and EN 1090-2, Execution class EXC2, Welding acc. to EN 17660-1		
	Where pursuant to Article 37 or 38 in the Specific Technical Documentation has been used, the requirements with which the product complies	Not applicable	
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.			

Langenfeld, 05.05.2015

Signed for and on behalf of the manufacturer by



Richard Wachter  
(Managing Director)



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