

# Declaration of Performance

## N°8.1



1. Unique identification code of the product type:  
HD units, Category I,  
BS format, brick with single frog
2. Code for identification:  
DOP code of the Declaration of Performance:  
8.1 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N°2510-CPR-311.
8. not relevant

### 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	215/102,5/65	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form b)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 20	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	EN 998-2: 2010
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 15	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Net dry density	Mean [kg/m <sup>3</sup> ]	1800	
	Deviation	D1 (10%)	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.  
This declaration of performance is issued under the sole responsibility of the manufacturer in accordance with point 4.

**This document must be kept with the product!**

Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-17

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG

# Declaration of Performance N°3



1. Unique identification code of the product type:  
HD units, Category I,  
Dünnformat
2. Code for identification:  
DOP code of the Declaration of Performance:  
3 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N° 2510-CPR-311.
8. not relevant

## 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	240/115/52	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form a)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 25	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	EN 998-2: 2010
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 12	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.

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

**This document must be kept with the product!**

Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-20

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG

# Declaration of Performance N°7



1. Unique identification code of the product type:  
HD units, Category I,  
Euro-Normalformat, brick with single frog
2. Code for identification:  
DOP code of the Declaration of Performance:  
7 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N° 2510-CPR-311.
8. not relevant

## 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	240/100/71	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form b)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 20	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	EN 998-2: 2010
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 12	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Net dry density	Mean [kg/m <sup>3</sup> ]	1800	
	Deviation	D1 (10%)	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.

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

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Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-17

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG

# Declaration of Performance N°5



1. Unique identification code of the product type:  
HD units, Category I,  
Normalformat
2. Code for identification:  
DOP code of the Declaration of Performance:  
5 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N° 2510-CPR-311.
8. not relevant

## 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	240/115/71	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form a)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 25	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	EN 998-2: 2010
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 12	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.

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

**This document must be kept with the product!**

Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-20

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG

# Declaration of Performance N°6



1. Unique identification code of the product type:  
HD units, Category I,  
Normalformat, brick with single frog
2. Code for identification:  
DOP code of the Declaration of Performance:  
6 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N° 2510-CPR-311.
8. not relevant

## 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	240/115/71	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form b)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 20	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	EN 998-2: 2010
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 12	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Net dry density	Mean [kg/m <sup>3</sup> ]	1800	
	Deviation	D1 (10%)	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.

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

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Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-17

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG

# Declaration of Performance N°4



1. Unique identification code of the product type:  
HD units, Category I,  
Reichsformat
2. Code for identification:  
DOP code of the Declaration of Performance:  
4 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N° 2510-CPR-311.
8. not relevant

## 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	240/115/65	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form a)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 25	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	EN 998-2: 2010
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 12	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.

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**This document must be kept with the product!**

Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-20

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG

# Declaration of Performance N°8



1. Unique identification code of the product type:  
HD units, Category I,  
Waldickformat, brick with single frog
2. Code for identification:  
DOP code of the Declaration of Performance:  
8 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N° 2510-CPR-311.
8. not relevant

## 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	210/100/65	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form b)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 20	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	EN 998-2: 2010
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 12	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Net dry density	Mean [kg/m <sup>3</sup> ]	1800	
	Deviation	D1 (10%)	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.

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

**This document must be kept with the product!**

Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-20

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG

# Declaration of Performance N°2



1. Unique identification code of the product type:  
HD units, Category I,  
Waalformat
2. Code for identification:  
DOP code of the Declaration of Performance:  
2 (see product label)
3. Intended use or uses of the construction product:  
For use in load bearing and non-load bearing masonry, protected and unprotected masonry
4. Manufacturer:  
Klinkerwerke H.W. Muhr GmbH & Co.KG  
Fackeldeystrasse 80-100  
46446 Emmerich am Rhein
5. not relevant
6. Attestation of conformity:  
System 2+
7. Notified body:  
The notified body for the inhouse production control - N° 2510 - performed the initial inspection of the manufacturing plant and the inhouse production control. It performed the continuous surveillance, assessment and evaluation of the inhouse production control and issued the certificate of conformity of the inhouse production control N° 2510-CPR-311.
8. not relevant

## 9. Declared Performance

Declared Performance Essential Characteristics		Performance	Harmonized technical specification
(Target) Dimensions	Length/Width/Height [mm]	210/100/50	EN 771-1: 2011
Dimensional Tolerance	Mean	T1	
	Range Category	R1	
Configuration		Form a)	
Compressive strength	Category	I	
	Mean [N/mm <sup>2</sup> ]	≥ 25	
	Direction of loading	Vertical to bed joint	
Moisture Movement		NPD	
Bond strength [N/mm <sup>2</sup> ] Tabulated value see attachment C		0,15	EN 998-2: 2010
Active soluble Salts		Class S2	EN 771-1: 2011
Reaction to fire		Euro Class A1	
Water absorption [mass-%]		≤ 12	EN 771-1: 2011
Water vapour permeability μ		50/100	EN 1745: 2012
Gross dry density	Mean [kg/m <sup>3</sup> ]	1600	EN 771-1: 2011
	Deviation	D1 (10%)	
	Configuration and Tolerances	See above	
Thermal conductivity [W/mK]		NPD	
Durability / Freeze/thaw resistance		F2	
Dangerous substances		According to ZA.3	

10. The performance of the product in accordance with points 1 and 2 corresponds with the declared performance in point 9.

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

**This document must be kept with the product!**

Signed for and on behalf of the manufacturer by:

Emmerich, 2015-03-20

Maik Muhr - Managing Director  
Klinkerwerke H. W. Muhr GmbH & Co. KG