



BELGIAN  
CONSTRUCTION  
CERTIFICATION  
ASSOCIATION  
npo

Founded by:  
BBRI and SECO

Nr: A-B-C-D-E

A: **BB**  
B: **651**  
C: **553**  
D: **1452**  
E: **553**

Valid

from

**01/03/2014**

to

**28/02/2017**

Rue d' Arlon 53,  
B - 1040 BRUSSELS

Tel. : +32 2 238 24 11  
Fax. : +32 2 238 24 01

www.bcca.be

**BENOR**

## PRODUCT CERTIFICATE

BCCA declares that has been established that the **applicant**

**Kabelwerk Eupen Ag  
Malmedyer Strasse 9  
B - 4700 Eupen**

takes the necessary measures in order to ascertain that the products:

**Pipes of Unplasticized poly(vinyl chloride) (PVC-U) pressurized  
for the diameter groups D1, D2 and D3**

manufactured in the factory located at:

**Kabelwerk Eupen Ag  
Malmedyer Strasse 9  
B - 4700 Eupen**

may correspond with the performances described in the standard **NBN EN 1452-1**

**Plastics piping systems for water supply and for buried and  
aboveground drainage and sewerage under pressure — Unplasticized  
poly(vinyl chloride) (PVC-U)**

**and the PTV 1001**

The certificate is delivered based on a study and an acceptance of the relevant **initial type tests (ITT)**, executed on relevant samples taken from the production unit and on bases of an initial inspection of the production and the **factory production control system (FPC)**.

BCCA confirms that the manufacturer applies a valid production control system and executes regular testing on samples taken from the production according to a fixed testing program. BCCA supervises the production and the production control system during the yearly audit of the FPC, periodical control of the internal control results and witness-testing.

On bases of the delivery and the maintenance of this certificate, the manufacturer is authorized to use the BENOR-logo as a means to attest the conformity of his products.

This certificate is valid during the period mentioned left side of this document, provided that the specification of the standard and the regulatory conditions are not modified.

Brussels, 21 March 2014

ir. Benny De Blaere  
General Manager



021 PROD

3844 - 3845 - 3846

**Pipes of Unplasticized poly(vinyl chloride) (PVC-U) pressurized**

TECHNICAL FILE	Version:	1
This documentation is part of the corresponding BENOR-certificate	Date:	21/03/2014
<b>BB - 651 - 553 - 1452 - P. D1/D2/D3</b>	Authorr:	CLE/BCCA

3.894 / 3.895 / 3.896

Types of pipes which are part of this certificate

Ø	Nominal pressure PN based on service (design) coefficient C=2,5								
	S 5	S 6,3	S 8	S 10	S 12,5	S 16	S 16,7	S 20	
	SDR 11	SDR 13,6	SDR 17	SDR 21	SDR 26	SDR 33	SDR 34,4	SDR 41	
	PN 20	PN16	PN 12,5	PN 10	PN 8	PN 6	PN 6		
P.D.1	16	1,5 - 1,9							
	20	1,9 - 2,3	1,5 - 1,9						
	25	2,3 - 2,8	1,9 - 2,3	1,5 - 1,9					
	32	2,9 - 3,4	2,4 - 2,9	1,9 - 2,3	1,6 - 2,0	1,5 - 1,9			
	40	3,7 - 4,3	3,0 - 3,5	2,4 - 2,9	1,9 - 2,3	1,6 - 2,0	1,5 - 1,9		
	50	4,6 - 5,3	3,7 - 4,3	3,0 - 3,5	2,4 - 2,9	2,0 - 2,4	1,6 - 2,0	1,5 - 1,9	
	63	5,8 - 6,6	4,7 - 5,4	3,8 - 4,4	3,0 - 3,5	2,5 - 3,0	2,0 - 2,4	1,9 - 2,3	
	75	6,8 - 7,7	5,6 - 6,4	4,5 - 5,2	3,6 - 4,2	2,9 - 3,4	2,3 - 2,8	2,2 - 2,7	
	90	8,2 - 9,3	6,7 - 7,6	5,4 - 6,2	4,3 - 5,0	3,5 - 4,1	2,8 - 3,3	2,7 - 3,2	
P.D.2	Nominal pressure PN based on service (design) coefficient C=2,0								
	PN 25	PN 20	PN 16	PN 12,5	PN 10	PN 8	PN7,5	PN 6	
	110	10,0 - 11,2	8,1 - 9,2	6,6 - 7,5	5,3 - 6,1	6,6 - 4,9	3,4 - 4,0	6,6 - 3,8	2,7 - 3,2
	125	11,4 - 12,8	9,2 - 10,4	7,4 - 8,4	6,0 - 6,8	7,4 - 5,5	3,9 - 4,5	7,4 - 4,3	3,1 - 3,7
	160	14,6 - 16,3	11,8 - 13,2	9,6 - 10,8	7,7 - 8,7	9,6 - 7,1	4,9 - 5,6	9,6 - 5,4	4,0 - 4,6
	200	18,2 - 20,3	14,7 - 16,4	11,9 - 13,3	9,6 - 10,8	11,9 - 8,7	6,2 - 7,1	11,9 - 6,7	4,9 - 5,6
	225		16,6 - 18,5	13,4 - 15,0	10,8 - 12,1	13,4 - 9,7	6,9 - 7,8	13,4 - 7,5	5,5 - 6,3
	250		18,4 - 20,5	14,8 - 16,5	11,9 - 13,3	14,8 - 10,8	7,7 - 8,7	14,8 - 8,3	6,2 - 7,1
	280		20,6 - 22,9	16,6 - 18,5	13,4 - 15,0	16,6 - 12,0	8,6 - 9,7	16,6 - 9,3	6,9 - 7,8
	315		23,2 - 25,8	18,7 - 20,8	15,0 - 16,7	18,7 - 13,6	9,7 - 10,9	18,7 - 10,4	7,7 - 8,7
400			23,7 - 26,3	19,1 - 21,3	23,7 - 17,1	19,1 - 13,8	23,7 - 13,1	19,1 - 11,0	
P.D.3									

PN value is based on C = 1,25 ❖ ovality calculated according to GRADE N

Marking of the pipe; printed directly, durable in use

**manufacturer** - commercial name - **dimension** - **Compound (PVC-U)** - **PN Value in bar** - **standard** - **BENOR** - **date** - **code of production** - **DRINKWATER** - **EAU POTABLE**



**BENOR**

# PRODUCT CERTIFICATE

BCCA declares that has been established that the **applicant**

**Kabelwerk Eupen Ag  
Malmedyer Strasse 9  
B - 4700 Eupen**

takes the necessary measures in order to ascertain that the products:

**Components of Unplasticized poly(vinyl chloride) (PVC-U)  
pressurized**

**for the component group C3: Double PVC-U sockets with elastomeric  
sealing  
for the diameter group D2**

manufactured in the factory located at:

**Kabelwerk Eupen Ag  
Malmedyer Strasse 9  
B - 4700 Eupen**

may correspond with the performances described in the standard **NBN EN 1452-1**

**Plastics piping systems for water supply and for buried and  
aboveground drainage and sewerage under pressure — Unplasticized  
poly(vinyl chloride) (PVC-U)**

**and the PTV 1001**

The certificate is delivered based on a study and an acceptance of the relevant **initial type tests (ITT)**, executed on relevant samples taken from the production unit and on bases of an initial inspection of the production and the **factory production control system (FPC)**.

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Brussels, 21 March 2014

ir. Benny De Blaere  
General Manager



021 PROD

18574

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