

BluePower[®]





BluePower®

BluePower® is the insert joint drainage system made of copolymer polypropylene + reinforcing charges, with soundproofing properties and outstanding resistance to knocks and stress.

The programme consists of the multilayer pipe with single socket and with double socket in diam. of 32 to 200 mm. The fittings are characterised by very innovative design and include special and exclusive elements such as the swept entry branch.

PATENTS

The technological innovation of BluePower® is represented by

2 European patents:

1. Ornamental, for the unique and innovative industrial design of the fittings
2. The gasket connection system on the ring which is mechanically inserted into the fitting socket

BluePower® pipes and fittings are compliant with UNI EN 1451-1.

- OUTSTANDING STRENGTH AND RESISTANCE TO MECHANICAL STRESS, EVEN AT LOW TEMPERATURES
- EXCELLENT LEVEL OF SOUNDPROOFING OF DRAINAGE NOISES
- PERFECT HYDRAULIC SEAL, EVEN IN BACKFLOW CONDITIONS, GUARANTEED BY THE BI-MATERIAL "DOUBLE LIP" GASKET
- EXCELLENT CHEMICAL RESISTANCE TO THE TRANSPORT OF FLUIDS IN COMPLIANCE WITH ISO/TR10358

AWARD DESIGN **PLUS** 2005 AWARD COMFORT & DESIGN 2006



RAW MATERIAL
NON-POLLUTANT
AND 100%
RECYCLABLE





THE EXCEPTIONAL SOUNDPROOFING OF BLUEPOWER®

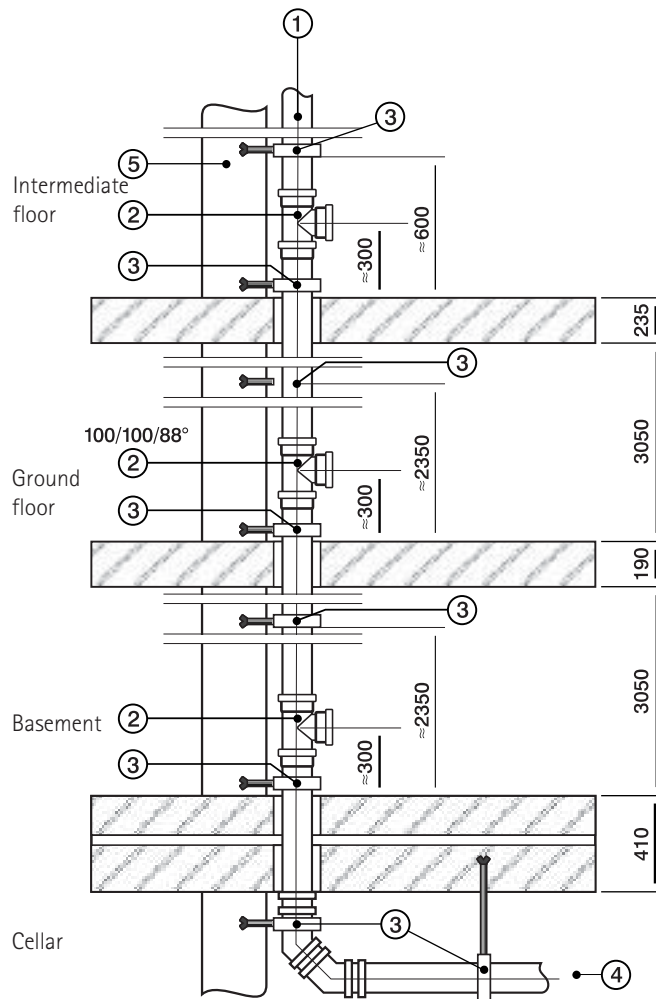
BluePower® is the drainage system capable of considerably reducing the noises made by water drainage.

Soundproofing test: conditions and results

Sound insulation tests were carried out at the Institute of Building Physics "Fraunhofer" in Stuttgart, in accordance with the DIN 4109 plant engineering scheme and EN14366.

Test system characteristics

- 1) BluePower® is installed on a concrete wall with a mass equal to 220 Kg/sq. m.
- 2) Pipes and fittings used have a diameter of 110 mm.
- 3) The column stretches from the mezzanine floor to the cellar via the ground floor. The connections are installed in the basement.
- 4) The system is sized with a flow rate of 0,5 – 1,0 – 2,0 – 4,0 litres/second.



- ① Drain pipe
- ② 87° branch
- ③ Collars for wall attachment
- ④ Drain
- ⑤ Concrete partition wall

The results obtained and certified are shown in the following table:

Measurements by the Fraunhofer Institute of construction physics in Stuttgart – Germany	BluePower® drainage system with Mupro 110, optimised fastening collars				
	l/s	0,5	1	2	4
Noise level L _{sc,A} (DbA) measured on the basis of the system fitted behind a wall, compliant with EN 14366	db (A)	12	14	17	22



THE SYSTEM



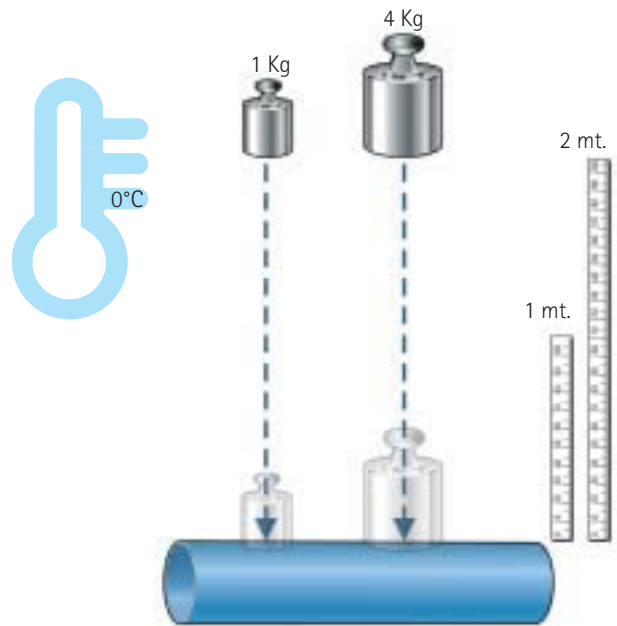
MECHANICAL RESISTANCE AND STRENGTH AT LOW TEMPERATURES

BluePower® is designed to meet the most stringent demands in terms of **strength and mechanical stress at low temperatures**, as proven by the results of the numerous laboratory tests carried out.



Strength test: conditions and results

Ball-drop and Charpy tests were carried out in order to prove the outstanding strength of the BluePower® system. The samples examined were conditioned at a temperature of 0°C for 24 hours.



Ball-drop Test

Carried out in compliance with EN 1451-1 and EN 744, it consists in subjecting product samples to the dropping of variable weights (minimum 0.5 Kg – maximum 4 kg) from heights of 1 and 2 metres.

		BluePower®
0,5 Kg 1 m	Sample 1	ok
	Sample 2	ok
1 Kg 1 m	Sample 1	ok
	Sample 2	ok
2 Kg 1 m	Sample 1	ok
	Sample 2	ok
4 Kg 1 m	Sample 1	ok
	Sample 2	ok
1 Kg 2 m	Sample 1	ok
	Sample 2	ok
2 Kg 2 m	Sample 1	ok
	Sample 2	ok
4 Kg 2 m	Sample 1	ok
	Sample 2	ok
	Sample 3	ok

Results

All the BluePower® samples passed the strength tests.

Charpy test

This involves measuring the ability to absorb impact energy of 10 product samples. The greater the energy absorbed, expressed in Joules, the greater is the resistance to impact.



	BluePower®
	Absorbed Joules (F)
Sample 1	0,550
Sample 2	0,399
Sample 3	0,750
Sample 4	0,750
Sample 5	0,654
Sample 6	0,400
Sample 7	0,626
Sample 8	0,460
Sample 9	0,505
Sample 10	0,589
Average Value	0,568

The results

The results of the comparative tests show BluePower® increased capacity to absorb impact, or to resist mechanical stress.

BLUEPOWER® PIPES

The BluePower® pipe is made up of three layers.

Colour

RAL 5019 blue. The inner layer of the pipes is white.

Pipe marking

COES, BluePower®, Multilayer Pipe, Process no., PP, DN x thickness, HTEM or HTDM, certificates and reference standards, date of manufacture.

Chemical resistance

BluePower® guarantees considerable resistance to an enormous number of chemicals. Especially surface active agents, even at high temperatures, in compliance with ISO/TR10358.

Reaction to fire

BluePower® is classified D S3 d0 in compliance with the European standard EN 13501.

Range

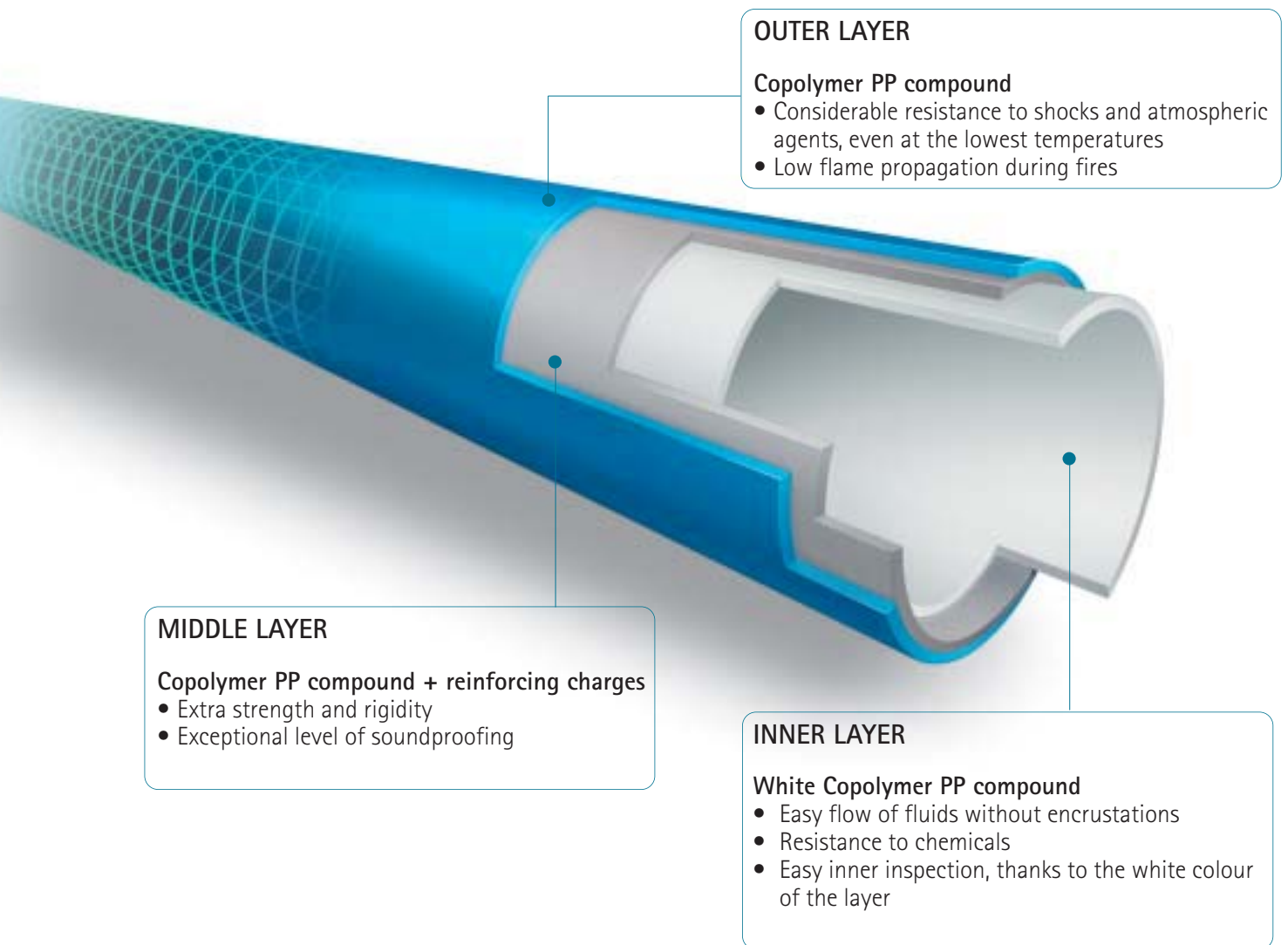
From DN 32 to 200 mm.

The pipes are also available in the double socket version up to a diameter of 125 mm and in the VACUUM pipe with a diameter of 40 to 75 mm.

The BluePower® VACUUM pipe

The anular rigidity and extra thickness of the BluePower® VACUUM pipe guarantee exceptional resistance to deformation due to:

- drainage in vacuum (tested up to -0,89 bar)
- external pressure, tested up to 3 bar at ambient temperature



OUTER LAYER

Copolymer PP compound

- Considerable resistance to shocks and atmospheric agents, even at the lowest temperatures
- Low flame propagation during fires

MIDDLE LAYER

Copolymer PP compound + reinforcing charges

- Extra strength and rigidity
- Exceptional level of soundproofing

INNER LAYER

White Copolymer PP compound

- Easy flow of fluids without encrustations
- Resistance to chemicals
- Easy inner inspection, thanks to the white colour of the layer

BLUEPOWER® FITTINGS

Made of PP copolymer compound plus reinforcing charges.

The **design of the fittings**, with innovative grooves, conveys improved compactness and strength, even at low temperatures.

The **double lip** gasket is co-moulded onto a polypropylene ring inserted mechanically into the socket of the fitting.

Besides simplifying the insertion of the pipe into the socket, the bi-material gasket cannot be moved, ensuring a perfect hydraulic seal, even in backflow conditions, and complete safety during installation.

PLUS

Objectification of the presence of the gasket in its seat, even after completing the installation.

Resistance to misalignment between pipe and socket: the stiffness of the socket and the stability of the gasket reduce ovalisation of the insert subject to mechanical stress.

Vacuum seal guaranteed by the presence of a double sealing lip, making it suitable for use in vacuum drainage systems such as those used in shipbuilding.

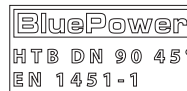
The range includes special and exclusive elements such as the swept entry branch in diam. of 110/90 and 110/110 mm.



The inserts moulded on the socket of the fitting display the following information:

Insert 1: Company brand

Insert 2: Product brand, Article description, reference standards



All fittings are supplied with an adhesive label showing the barcode, article code and description of the part.



Gasket section

PATENT



THE SYSTEM

THE "AESTHETIC VALUE" OF BLUEPOWER®

Drainage systems are normally designed to be functional and practical. COES, on the other hand, has conceived a product which is not just aesthetically "fair". The attention paid to the design of the details is aimed at achieving new quality standards for transport, storage, installation of the system.

PLUS

Fittings

- Industrial Design and compactness of parts
- Block with Logo
- Adhesive label with barcode and part description
- Packaging

Pipes

- Marking
- Socket protection with a special sheath
- Packaging with strapping



BluePower® obtained the **Design Plus 2005 award** run by the Frankfurt Trade Fair in collaboration with the German Design Council, for its product concept and innovative industrial design.



BluePower® obtained the **Comfort & Design 2006 award** run by Fiera Milano International, within the context of Mostra Convegno Expocomfort for its advanced design criteria (innovation and usability with respect for the environment).

"SOCKET" CONNECTION

Connection instructions

"Socket" connection is easy and quick:

- 1) Clean the pipe and sleeve ends.
- 2) Check the integrity of the gasket in the socket (Fig. 1).



Fig. 1

- 3) Lubricate the part to be coupled with COES product AT1426 (Fig. 2).



Fig. 2

- 4) Insert the pipe as far as the socket strike plate; then back-up by 10 mm (Fig. 3).



Fig. 3

- 5) The BluePower® pipes and fittings have a perfectly bevelled edge to facilitate connection. If pieces of pipe are used, make a precise, perpendicular cut (Fig. 4). Then, bevel using suitable equipment, to avoid damaging the gasket during connection (Fig. 5).



Fig. 4



Fig. 5

FASTENING THE SYSTEMS

The design and sizing of drainage and rainwater systems must take into account UNI 12056-1-2-3-4-5. Take into account any national laws or provisions during the installation and use of the BluePower® system. The insert joint system guarantees the hydraulic seal. Any mechanical stress must be considered during design and assembly to avoid jeopardising the system's hydraulic seal.

The systems must be fastened in place using collars positioned under the socket, to prevent slipping (Fig. 1).

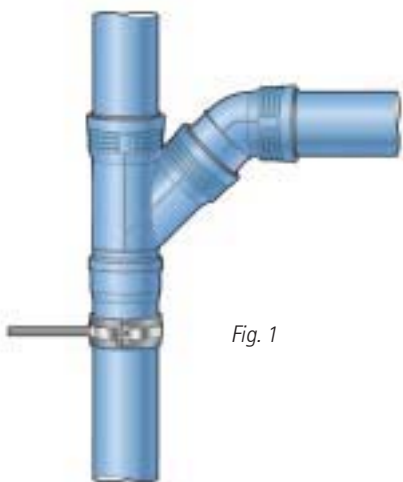


Fig. 1

The maximum distance between the collars must not exceed:

- for horizontal pipes, 10 times the pipe diameter
- for vertical pipes, 15 times the pipe diameter

Moreover, all the fittings that generate a change in direction of the system must be adequately supported with brackets to prevent the socket from slipping out of place in the event of accidental overpressure. The water column must not exceed a maximum height of 5 metres.

A three-way sleeve is used to insert a branch onto an existing pipe. This is achieved by cutting a portion of the pipe, equal to the length of the branch to be inserted plus the depth of the sleeve insertion. The sleeve is inserted in the upper part up to the strike plate and the branch is inserted in the part below with an HTU sleeve. Finally the end of the sleeve is inserted on the branch socket (Fig. 2)

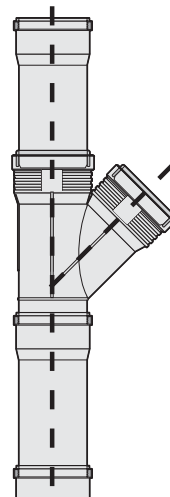
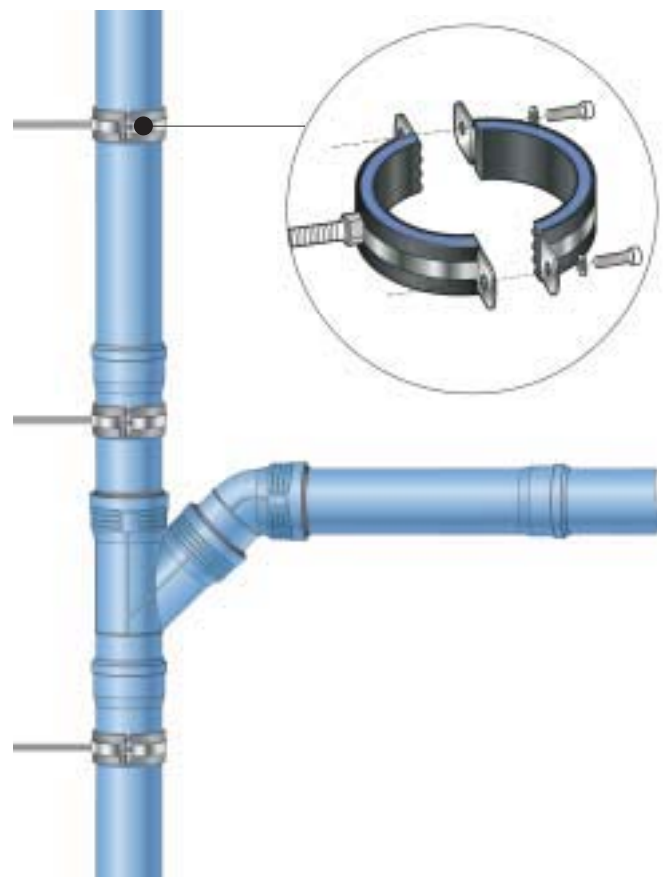


Fig. 2

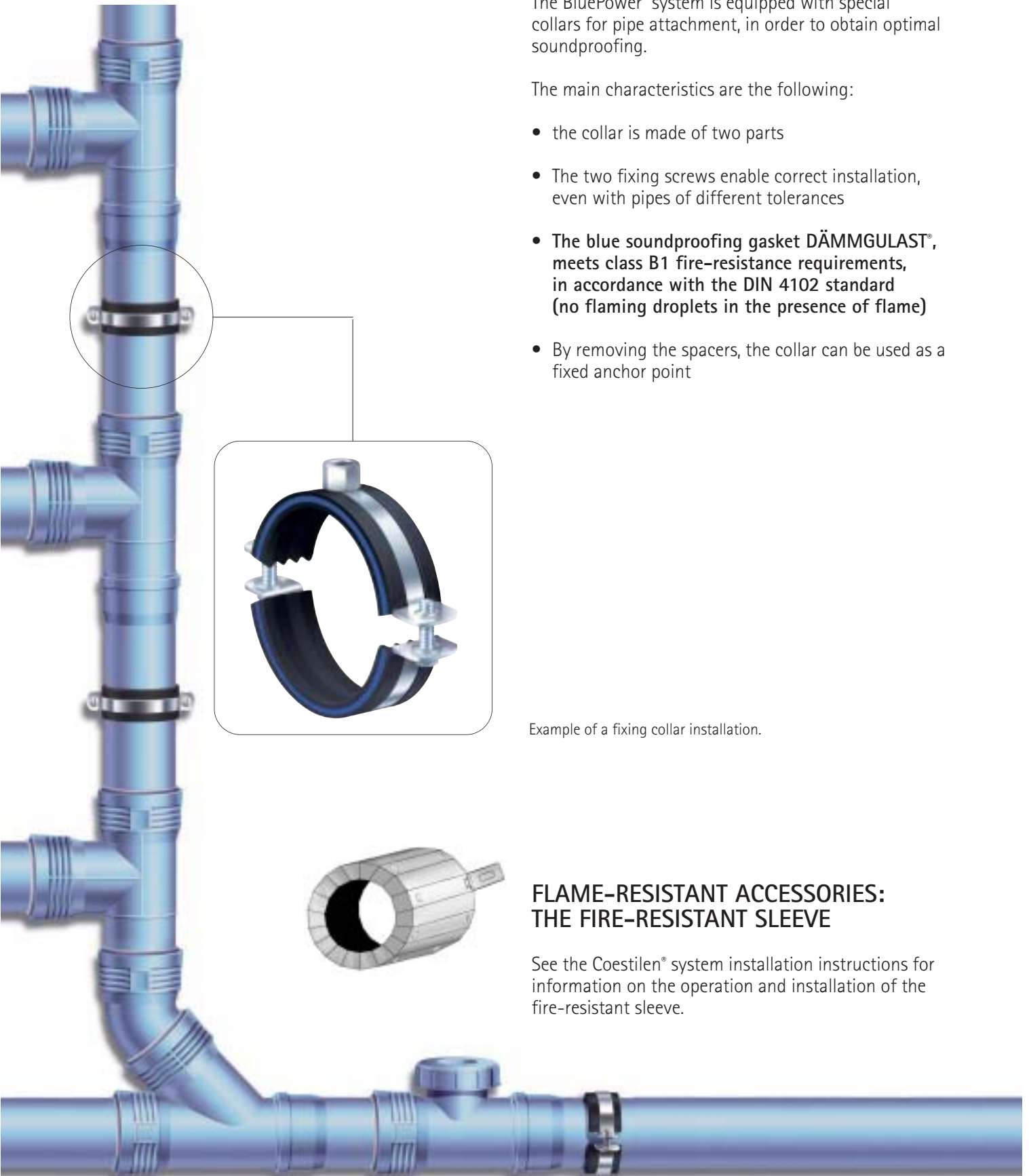
The length of the connection socket has been calculated to absorb the thermal expansion of pipes to a maximum of 2 metres.

It is usual to calculate a thermal expansion of 5 mm per metre in the wastewater drain and 2 mm per metre in rainwater pipes.

Thermal expansion must be taken into account when constructing the system. For this purpose, a fixed point must be installed under the sleeve of every pipe which will lock that part of the system, leaving the remaining part free to expand.



FIXING COLLARS



The BluePower® system is equipped with special collars for pipe attachment, in order to obtain optimal soundproofing.

The main characteristics are the following:

- the collar is made of two parts
- The two fixing screws enable correct installation, even with pipes of different tolerances
- The blue soundproofing gasket DÄMMGULAST®, meets class B1 fire-resistance requirements, in accordance with the DIN 4102 standard (no flaming droplets in the presence of flame)
- By removing the spacers, the collar can be used as a fixed anchor point

Example of a fixing collar installation.

FLAME-RESISTANT ACCESSORIES: THE FIRE-RESISTANT SLEEVE

See the Coestilen® system installation instructions for information on the operation and installation of the fire-resistant sleeve.

FIELDS OF USE

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Thanks to its outstanding strength and soundproofing characteristics BluePower® is particularly suitable for the following fields of use:

- Drainage for sanitary fittings, washing machines and dishwashers
- Prolonged drainage of waste waters (large residential developments)
- Ventilation and drain pipes
- Drainage of aggressive fluids

Thanks to its excellent resistance to deformation due to a vacuum inside the pipe and pressure applied from outside, the BluePower® Vacuum pipe can be used for:

- Vacuum drains
- Underground systems



PIPE SOCKET PROTECTION

The pipes are protected with a special thermoformed plastic sheath to guarantee safe transport and storage.

In addition to this, certain correct indications will enable the maintenance of the performance of BluePower® pipes in time.



TRANSPORT

Avoid untidy transport if the pipes have been removed from their original packaging (Fig. 1).

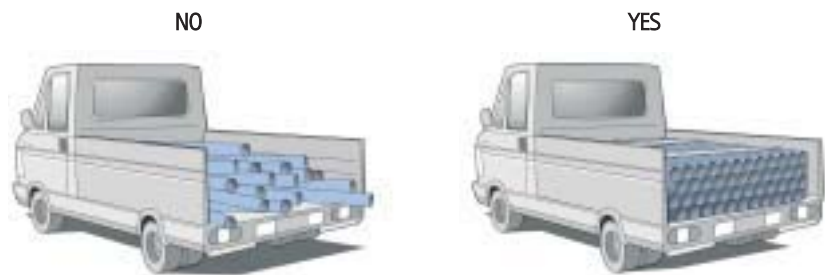


Fig. 1

Avoid dragging them across the ground or against the walls of the vehicle (Fig. 2).

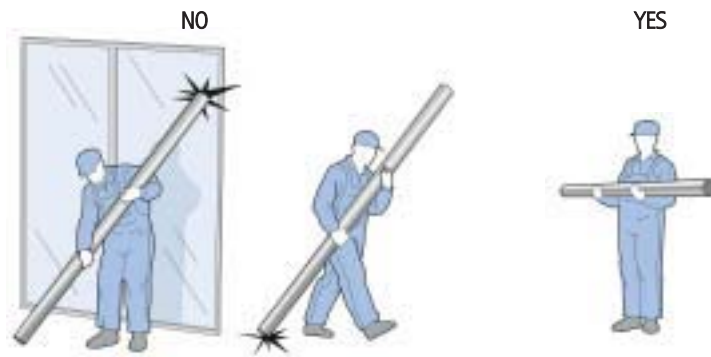


Fig. 2

STORAGE

To avoid deformations in time, the maximum stacking height must not exceed 2 metres, whatever their diameter (Fig. 3). Outdoor storage must be limited to a maximum of 2 years. The pipes must be laid on flat, smooth surfaces.

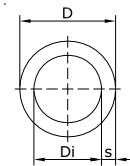
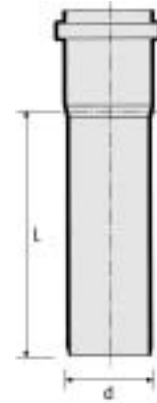


Fig. 3

SOUNDPROOF MULTILAYER PIPES IN PPC + REINFORCING CHARGES

Pipe with one socket HTEM

code	d	di	L	s	S*
100301B	32	28,4	150	1,8	16
100302B	32	28,4	250	1,8	16
100305B	32	28,4	500	1,8	16
100310B	32	28,4	1000	1,8	16
100315B	32	28,4	1500	1,8	16
100320B	32	28,4	2000	1,8	16
100330B	32	28,4	3000	1,8	16
100401B	40	36,4	150	1,8	16
100402B	40	36,4	250	1,8	16
100405B	40	36,4	500	1,8	16
100410B	40	36,4	1000	1,8	16
100415B	40	36,4	1500	1,8	16
100420B	40	36,4	2000	1,8	16
100430B	40	36,4	3000	1,8	16
100501B	50	46,4	150	1,8	16
100502B	50	46,4	250	1,8	16
100505B	50	46,4	500	1,8	16
100507B	50	46,4	750	1,8	16
100510B	50	46,4	1000	1,8	16
100515B	50	46,4	1500	1,8	16
100520B	50	46,4	2000	1,8	16
100530B	50	46,4	3000	1,8	16
100701B	75	70,4	150	2,3	16
100702B	75	70,4	250	2,3	16
100705B	75	70,4	500	2,3	16
100707B	75	70,4	750	2,3	16
100710B	75	70,4	1000	2,3	16
100715B	75	70,4	1500	2,3	16
100720B	75	70,4	2000	2,3	16
100730B	75	70,4	3000	2,3	16
100901B	90	84,4	150	2,8	16
100902B	90	84,4	250	2,8	16
100905B	90	84,4	500	2,8	16
100910B	90	84,4	1000	2,8	16
100915B	90	84,4	1500	2,8	16
100920B	90	84,4	2000	2,8	16
100930B	90	84,4	3000	2,8	16
101101B	110	103,2	150	3,4	16
101102B	110	103,2	250	3,4	16
101105B	110	103,2	500	3,4	16
101107B	110	103,2	750	3,4	16
101110B	110	103,2	1000	3,4	16
101115B	110	103,2	1500	3,4	16
101120B	110	103,2	2000	3,4	16
101130B	110	103,2	3000	3,4	16
101201B	125	117,2	150	3,9	16
101202B	125	117,2	250	3,9	16
101205B	125	117,2	500	3,9	16
101207B	125	117,2	750	3,9	16
101210B	125	117,2	1000	3,9	16
101215B	125	117,2	1500	3,9	16
101220B	125	117,2	2000	3,9	16



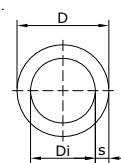
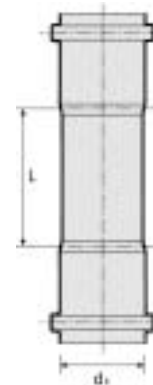
* S: Dimensional series envisaged by EN 1451-1.

SOUNDPROOF MULTILAYER PIPES IN PPC + REINFORCING CHARGES

code	d	di	L	s	S*
101230B	125	117,2	3000	3,9	16
101601B	160	150,2	150	4,9	16
101602B	160	150,2	250	4,9	16
101605B	160	150,2	500	4,9	16
101610B	160	150,2	1000	4,9	16
101615B	160	150,2	1500	4,9	16
101620B	160	150,2	2000	4,9	16
101630B	160	150,2	3000	4,9	16
102002B	200	187,6	250	6,2	16
102005B	200	187,6	500	6,2	16
102010B	200	187,6	1000	6,2	16
102015B	200	187,6	1500	6,2	16
102020B	200	187,6	2000	6,2	16
102030B	200	187,6	3000	6,2	16

Pipe with two sockets HTDM

code	d	di	L	s	S*
090305B	32	28,4	500	1,8	16
090310B	32	28,4	1000	1,8	16
090315B	32	28,4	1500	1,8	16
090320B	32	28,4	2000	1,8	16
090330B	32	28,4	3000	1,8	16
090405B	40	36,4	500	1,8	16
090410B	40	36,4	1000	1,8	16
090415B	40	36,4	1500	1,8	16
090420B	40	36,4	2000	1,8	16
090430B	40	36,4	3000	1,8	16
090505B	50	46,4	500	1,8	16
090510B	50	46,4	1000	1,8	16
090515B	50	46,4	1500	1,8	16
090520B	50	46,4	2000	1,8	16
090530B	50	46,4	3000	1,8	16
090705B	75	70,4	500	2,3	16
090710B	75	70,4	1000	2,3	16
090715B	75	70,4	1500	2,3	16
090720B	75	70,4	2000	2,3	16
090730B	75	70,4	3000	2,3	16
090905B	90	84,4	500	2,8	16
090910B	90	84,4	1000	2,8	16
090915B	90	84,4	1500	2,8	16
090920B	90	84,4	2000	2,8	16
090930B	90	84,4	3000	2,8	16
091105B	110	103,2	500	3,4	16
091110B	110	103,2	1000	3,4	16
091115B	110	103,2	1500	3,4	16
091120B	110	103,2	2000	3,4	16
091130B	110	103,2	3000	3,4	16
091205B	125	117,2	500	3,9	16
091210B	125	117,2	1000	3,9	16
091215B	125	117,2	1500	3,9	16
091220B	125	117,2	2000	3,9	16
091230B	125	117,2	3000	3,9	16

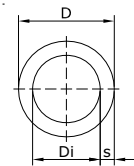
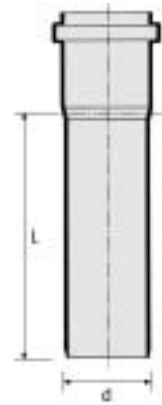


* S: Dimensional series envisaged by EN 1451-1.

SOUNDPROOF MULTILAYER PIPES IN PPC + REINFORCING CHARGES

Vacuum pipe with one socket HTEM

code	d	di	L	s	S*
080401B	40	35,6	150	2,2	9
080402B	40	35,6	250	2,2	9
080405B	40	35,6	500	2,2	9
080410B	40	35,6	1000	2,2	9
080415B	40	35,6	1500	2,2	9
080420B	40	35,6	2000	2,2	9
080430B	40	35,6	3000	2,2	9
080501B	50	44,6	150	2,7	9
080502B	50	44,6	250	2,7	9
080505B	50	44,6	500	2,7	9
080507B	50	44,6	750	2,7	9
080510B	50	44,6	1000	2,7	9
080515B	50	44,6	1500	2,7	9
080520B	50	44,6	2000	2,7	9
080530B	50	44,6	3000	2,7	9
080701B	75	67	150	4	9
080702B	75	67	250	4	9
080705B	75	67	500	4	9
080707B	75	67	750	4	9
080710B	75	67	1000	4	9
080715B	75	67	1500	4	9
080720B	75	67	2000	4	9
080730B	75	67	3000	4	9

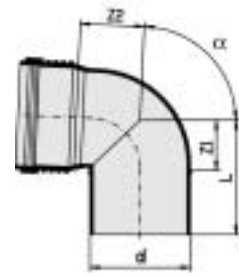


* S: Calculated dimensional series

SOUNDPROOF FITTINGS IN PPC + REINFORCING CHARGES

Bend HTB

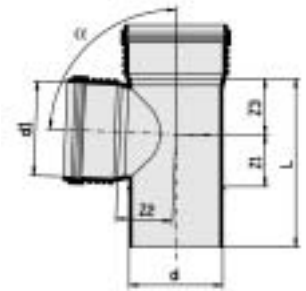
code	d	α	Z1	Z2	L
110315B	32	15°	3	7	54
110415B	40	15°	4	10	60
110515B	50	15°	5	11	62
110715B	75	15°	7	12	70
110915B	90	15°	8	15	75
111115B	110	15°	9	20	88
111215B	125	15°	10	20	93
111615B	160	15°	12	20	103
110330B	32	30°	6	7	52
110430B	40	30°	7	13	60
110530B	50	30°	8	14	65
110730B	75	30°	12	18	74
110930B	90	30°	14	20	85
111130B	110	30°	16	28	93
111230B	125	30°	18	25	108
111630B	160	30°	23	30	117
110345B	32	45°	8	10	55
110445B	40	45°	11	17	65
110545B	50	45°	13	19	67
110745B	75	45°	18	25	81
110945B	90	45°	21	28	88
111145B	110	45°	25	35	100
111245B	125	45°	29	36	114
111645B	160	45°	36	45	128
112045B	200	45°	43	54	135
110367B	32	67°30'	13	15	60
110467B	40	67°30'	18	24	70
110567B	50	67°30'	21	27	76
110767B	75	67°30'	29	35	90
110967B	90	67°30'	34	40	100
111167B	110	67°30'	41	47	116
111267B	125	67°30'	46	52	132
111667B	160	67°30'	58	64	151
110387B	32	87°30'	14	16	62
110487B	40	87°30'	26	32	80
110587B	50	87°30'	31	37	86
110787B	75	87°30'	43	49	106
110987B	90	87°30'	50	56	117
111187B	110	87°30'	60	70	128
111287B	125	87°30'	67	73	150
111687B	160	87°30'	84	90	176
112087B	200	87°30'	96	103	190



SOUNDPROOF FITTINGS IN PPC + REINFORCING CHARGES

Branch HTEA

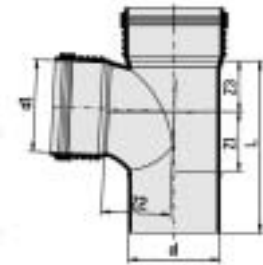
code	d - d1	α	Z1	Z2	Z3	L
200303B	32/32	45°	9	40	40	95
200404B	40/40	45°	11	49	49	118
250404B	40/40	67°30'	11	33	33	105
300404B	40/40	87°30'	26	25	25	105
200504B	50/40	45°	6	56	54	120
250504B	50/40	67°30'	16	39	36	106
300504B	50/40	87°30'	26	30	25	106
200505B	50/50	45°	13	61	61	133
250505B	50/50	67°30'	21	41	41	116
300505B	50/50	87°30'	31	30	30	116
200705B	75/50	45°	1	80	73	137
250705B	75/50	67°30'	16	56	47	122
300705B	75/50	87°30'	30	31	43	122
200707B	75/75	45°	18	91	91	172
250707B	75/75	67°30'	29	49	49	147
300707B	75/75	87°30'	43	43	43	147
200905B	90/50	45°	-7	91	81	149
300905B	90/50	87°30'	30	50	31	129
200909B	90/90	45°	21	109	109	197
300909B	90/90	87°30'	50	51	51	169
201105B	110/50	45°	-17	107	92	166
251105B	110/50	67°30'	9	79	55	139
301105B	110/50	87°30'	30	67	34	135
201107B	110/75	45°	1	119	109	183
251107B	110/75	67°30'	22	81	67	163
301107B	110/75	87°30'	42	64	46	160
201111B	110/110	45°	25	134	134	232
251111B	110/110	67°30'	42	89	89	201
301111B	110/110	87°30'	60	66	66	200
201207B	125/75	45°	-7	132	118	198
301207B	125/75	87°30'	42	47	68	167
201211B	125/110	45°	18	146	141	239
251211B	125/110	67°30'	38	96	89	208
301211B	125/110	87°30'	60	69	63	200
201212B	125/125	45°	29	151	151	261
251212B	125/125	67°30'	46	97	97	221
301212B	125/125	87°30'	67	69	69	219
201611B	160/110	45°	0	176	160	255
251611B	160/110	67°30'	31	124	100	222
301611B	160/110	87°30'	59	93	64	214
201616B	160/160	45°	36	193	193	322
301616B	160/160	87°30'	84	89	89	265
202016B	200/160	45°	6	198	198	340
202020B	200v200	45°	12	203	203	345



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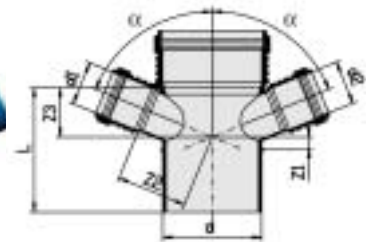
Swept-entry branch

code	d - d1	Z1	Z2	Z3	L
221190B	110/90	57	57	82	188
221111B	110/110	73	61	82	207



Double branch HTDA

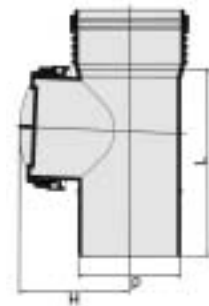
code	d - d1	α	Z1	Z2	Z3	L
361105B	110/50/50	67°30'	10	79	55	140
361111B	110/110/110	67°30'	50	89	89	200
361211B	125/110/110	67°30'	40	96	89	208
361212B	125/125/125	67°30'	46	97	97	221
361611B	160/110/110	67°30'	35	124	100	222



code	d - d1	α	Z1	Z2	Z3	L
381111B	110/110/110	87°30'	60	66	66	200

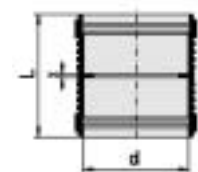
Linear inspection HTRE

code	d	H	L
320505B	50	70	115
320707B	75	80	142
320909B	90	86	157
321111B	110	95	195
321212B	125	105	214
321616B	160	126	238



Coupling with shutter HTMM

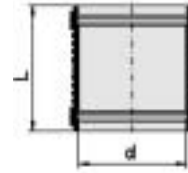
code	d	α	L
400320B	32	3	108
400420B	40	2	110
400520B	50	2	115
400720B	75	3	125
400920B	90	4	132
401120B	110	4	132
401220B	125	4	162
401620B	160	5	180



SOUNDPROOF FITTINGS IN PPC + REINFORCING CHARGES

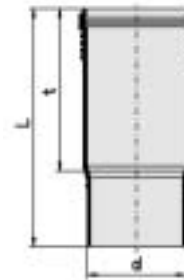
Coupling HTU

code	d	L
400410B	40	110
400510B	50	115
400710B	75	125
400910B	90	132
401110B	110	132
401210B	125	162
401610B	160	180
402010B	200	202



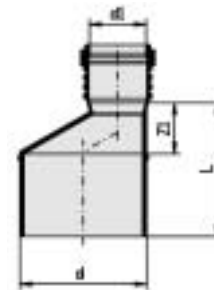
Triple-depth socket HTLL

code	d	t	L
400430B	40	114	174
400530B	50	115	178
400730B	75	130	199
400930B	90	173	250
401130B	110	180	266
401230B	125	216	309
401630B	160	238	340



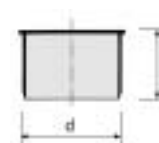
Increase HTR

code	d - d1	Z1	L
150304B	32/40	10	53
150305B	32/50	16	66
150405B	40/50	14	74
150409B	40/90	30	99
150507B	50/75	22	86
150509B	50/90	31	99
150511B	50/110	43	118
150711B	75/110	28	102
150911B	90/110	20	95
151112B	110/125	17	101
151116B	110/160	43	138
151216B	125/160	30	125
151620B	160/200	30	135



Closing plug HTM

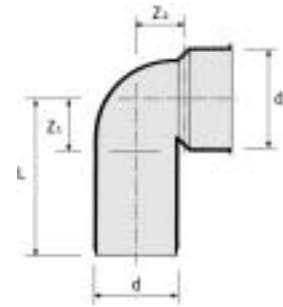
code	d	L
390400B	40	35
390500B	50	35
390700B	75	45
390900B	90	50
391100B	110	50
391200B	125	55
391600B	160	70



CONNECTIONS TO SANITARY FIXTURES AND WC

Technical bend HTSW, with plug

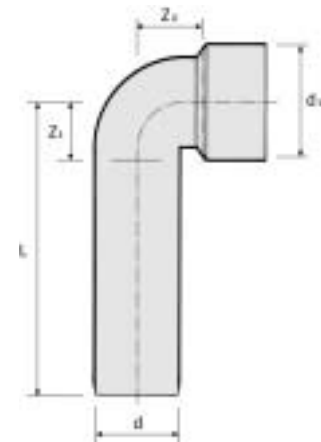
code	d - d1	Z1	Z2	L
430346B	32/46	23,5	24	76
430446B	40/46	23,5	24	76
430405B	40/50	23,5	24	76
430505B	50/50	28,5	29	82



Extended technical bend HTSWL, with plug

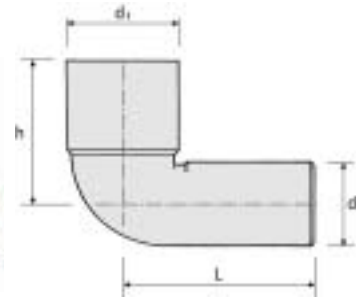
code	d - d1	Z1	Z2	L
470446B	40/46	23,5	20	152
470405B	40/50	28,5	20	152

N.B. For the seals see Coestilen® and Coesprene®



Extended WC bend HTSBL

code	d - d1	L	h
490900B	90	230	175
491100B	110	230	185

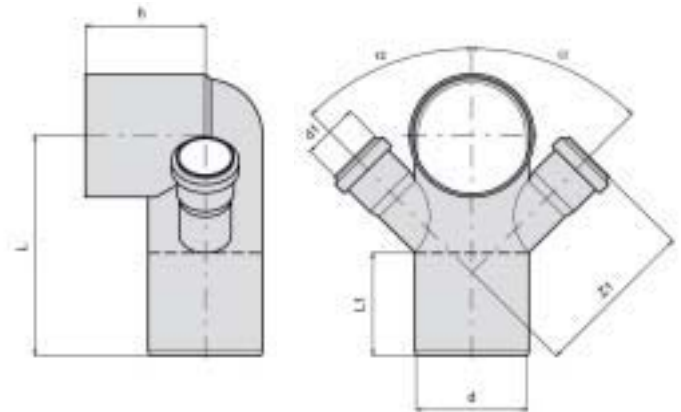


CONNECTIONS TO SANITARY FIXTURES AND WC

Extended WC bend with 2 couplings HTSBL

code	d - d1	α	Z1	h	L1	L
481124B	110/40	45°	105	185	105	230
481125B	110/50	45°	105	185	100	230

N.B. For the whole WC connections range see Coesprene®



FIRE FIGHTING SYSTEM

Fire barrier coupling for REI 120 walls,
REI 180 walls and REI 180 floors

code	D1	D2	L
MT0501	50	73	47,5
MT0601	63	88	52,5
MT0701	75	100	62,5
MT0901	90	125	72,5
MT1101	110	149	82,5
MT1201	125	162	92,5
MT1601	160	209	112,5
MT2001	200	239	122,5



D1 = Pipe diameter
D2 = External coupling diameter
L = Coupling length

N.B. N.B. See the Coestilen® system installation instructions

ACCESSORIES

Soundproof band with M10 threaded nut

code	d
560300	32
560400	40
560500	50
565800	58
560700	75/78
560900	90
561100	110
561200	125
561300	135
561600	160
562000	200



Soundproof band with 1/2" gas-threaded nut

code	d
570300	32
570400	40
570500	50
575800	58
570700	75/78
570900	90
571100	110
571200	125
571300	135
571600	160
572000	200

Note: for the spare parts see our price list