

DIN EN ISO 21003-2:2011-07 (E)

Multilayer piping systems for hot and cold water installations inside buildings - Part 2: Pipes (ISO 21003-2:2008 + Amd 1:2011) (includes Amendment A1:2011)

Contents		Page
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	7
4	Symbols and abbreviated terms	7
5	Material	7
5.1	General	7
5.2	Processable materials	7
5.3	Influence on water intended for human consumption	7
6	General characteristics	7
6.1	Appearance	7
6.2	Opacity	7
7	Construction	8
8	Geometrical characteristics	8
8.1	General	8
8.2	Dimensions of pipes	8
9	Pressure strength	8
9.1	Long-term pressure strength (pLPL)	8
9.2	Design pressure strength (pD)	8
10	Thermal durability	9
10.1	Thermal durability of P-pipes	9
10.2	Thermal durability of M-pipes	9
11	Strength of the weld line of M-pipes	9
12	Delamination	9
12.1	Multilayer P-pipes	9
12.2	Multilayer M-pipes	9
13	Oxygen permeability	10
14	Physical and chemical characteristics	10
15	Performance requirements	10
16	Marking	10
16.1	General requirements	10
16.2	Minimum required marking	11
Annex A (normative) List of reference product standards		12

Annex B (normative) Design coefficients for multilayer pipes	13
Annex C (normative) Determination of the thermal durability of the outer layer of M-pipes from resistance to cracking after oven ageing	14
Annex D (normative) Determination of the thermal durability of the outer layer of M-pipes from the elongation at break after 50 years	16
Annex E (normative) Multilayer M-pipes -- Choice of pD and the use of Miner's rule	18
Bibliography	22