

Material	Colour	Texture	Nail Test	Floats on water	Flammability	Joining	Density (g/cm3)
PVC-U	Dark Grey	Shiny Smooth	No	No	In flame carbonises, extinguishes away from flame	Solvent cement: Tangit/Dytex	1.38
PVC-C	Light Grey	Shiny Smooth	No	No	In flame carbonises, extinguishes away from flame	Solvent cement: Tangit/Dytex	1.5
ABS	Mid Grey	Shiny Smooth	No	No	Bright flame and drips, continues to burn away from flame	Solvent cement: Tangit	1.03
PE	Black	Waxy	Yes	Yes	Bright flame and drips, continues to burn away from flame	Heat Fusion: Butt, socket & electro fusion, compression	0.95
PROGEF PP Standard	Light Beige	Waxy	Slight	Yes	Bright flame and drips, continues to burn away from flame	Heat Fusion: Butt fusion, Socket fusion & IR	0.91
PROGEF PP Natural	Brown - Opaque	Waxy	Slight	Yes	Bright flame and drips, continues to burn away from flame	Heat Fusion: Butt fusion, BCF & IR	0.91
SYGEF PVDF Plus & Standard	White - Opaque	Shiny Smooth	No	No	In flame carbonises, extinguishes away from flame	Heat Fusion: Butt fusion, BCF & IR	1.78
PB (INSTAFLEX; IFIT)	Grey	Smooth	Slight	Yes	Continues to burn away from flame	Heat Fusion: Butt, socket & electro fusion, compression	0.94
Multilayer pipe (IFIT)	White	Smooth	No	Yes	Normal flammable	Push fit	0.94
PP-R (AQUASYSTEM)	Light brown	Smooth	Slight	Yes	Bright flame and drips, continues to burn away from flame	Heat fusion: Socket & electro fusion	0.905

Material	Operating Temperature	Dimension
PVC-U	-50 - 40	6 - 400 mm
PVC-C	0°C to +60°C	3/8 - 8 inch
ABS	0°C to +80°C	16 - 225 mm
PE	d250 - d315 operating temp +40°C	16 - 315 mm
PROGEF PP	-40°C to +60°C	3/8 - 8 inch
SYGEF PVDF	-50°C to +60°C	16 - 630 mm
PB (INSTAFLEX; IFIT)	-10°C to +90°C	16 - 500 mm
Multilayer pipe (IFIT)	-20°C to +140°C	16 - 315 mm
PP-R (AQUASYSTEM)	-0°C to +95°C	16 - 225 mm
	-0°C to +95°C	16 - 32 mm
	0°C to +95°C	16 - 125 mm

Material	Maximum pressure rating (PN) based on 20°C water	inch - metric ranges
PVC-U BS Inch	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 bar	1/2 15 3/4 20 1 25 1 1/4 32 1 1/2 40 2 50 2 1/2 63 3 75 4 90 5 110 6 140 8 160 8 225
PVC-U Metric	PN15 (Class D 3/4 - 4") PN9 (Class C 2 - 8") PN12 (Class 7T 3/8 - 2") PN16 (6-160mm) PN10 (25-315mm) PN10 (75-225mm) PN16 (16-160mm) PN12 (Class D 6") PN9 (Class C 1-8") PN12 (Class 7T 1/2 - 2") PN6 (d250 - d315) PN10	
PVC-C	PN16 (16-160mm)	
ABS BS Inch	PN15 (Class E 3/8 - 4")	
ABS Metric	PN10 (d52 - d225)	
PE	PN10	
PROGEF PP Standard	PN10 (16-500mm) PN6 (50-500mm)	
PROGEF PP Natural	PN10 (20-63mm) PN6 (75-110mm)	
SYGEF PVDF Plus & Standard	PN16 (20-225mm)	
PB (INSTAFLEX; IFIT)	PN10 (90 - 315mm)	
INSTA BIG d125 - d225 Multilayer pipe (IFIT)	PN16	
PP-R (AQUASYSTEM)	PN16	

Pipe Sizes nearest equivalent

NB (inch)	OD(mm)	DN (mm)
1/2	20	15
3/4	25	20
1	32	25
1 1/4	40	32
1 1/2	50	40
2	63	50
2 1/2	75	65
3	90	80
4	110	100
5	140	125
6	160	150
8	225	200

All Values are at a design (safety) factor between 1.25 and 2. Review pressure temp curve on planning fundamentals website for specific design factor