

P&C[®] Duct and Telephone Duct – Specification

Physical Properties of P&C[®] Duct by ASTM Test Methods

Property	ASTM No.	Typical Values	
		P&C [®] Duct	Telephone Duct
Tensile strength, psi	D638	4,800	4,800
Modulus of elasticity in tension, psi	D638	500,000	500,000
Flexural strength, psi	D790	11,000	11,000
Deflection temp under load at 265 psi deg. C	D648	72°C	72°C
Coefficient of thermal expansion in/in/°F	D696	3.30 x 10 ⁻⁵	3.30 x 10 ⁻⁵
Coefficient of static friction		.20	.20

Collapse Pressure of P&C Duct Materials (PSI)

2" EB-20 – 11.2	5" EB-20 – 5.9
2" EB-35 – 11.2	5" EB-35 – 10.3
2" DB-60 – 11.2	5" DB-60 – 18.9
2" DB-120 – 26.6	5" DB-120 – 38.2
3" EB-20 – 6.6	
3" EB-35 – 8.2	6" EB-20 – 6.1
3" DB-60 – 15.2	6" EB-35 – 11.2
3" DB-120 – 34.0	6" DB-60 – 19.6
4" EB-20 – 6.7	6" DB-120 – 38.0
4" EB-35 – 9.2	
4" DB-60 – 17.0	
4" DB-120 – 36.6	

Collapse Pressure of Telephone Duct Materials (PSI)

Type B Duct –	9.2
Type C Duct –	36.6
Type D Duct –	36.6

Performance Properties of P&C Duct as Indicated per NEMA Standard TC-6 & 8 and ASTM F-512

Pipe Stiffness lb/in/in

Conduit Series	Minimum Pipe Stiffness (F/Δy), all sizes
EB-20	20
EB-35	35
DB-60	60
DB-100	100
DB-120	120

Minimum Impact Resistance at 0°C (32°F) ft • lbf

Nominal Size	Conduit Series				
	EB-20	EB-35	DB-60	DB-100	DB-120
1	–	–	–	–	10
1 1/2	–	–	10	–	15
2	20	20	20	–	25
3	20	30	40	45	50
3 1/2	20	35	50	60	65
4	25	40	60	70	80
5	30	55	85	100	110
6	40	75	120	135	150

Performance Properties of Telephone Duct as Indicated per NEMA Standard TC-10

Pipe Stiffness F/Δy lb/in/in

Nominal Size	B-Duct	HWB	C-Duct	D-Duct
All	30	40	120	120

Minimum Impact Resistance at 32°C

B-Duct ft. lb.	C-Duct ft. lb.	D-Duct ft. lb.
25	50	50