## **CORZAN® CPVC PIPE PRESSURE RATINGS**

corzan.com/en-us/piping-systems/specification/pressure-ratings

## **Pipe and Fittings**

Industrial pipe and fittings respond differently to internal pressures. The Corzan<sup>®</sup> CPVC compound has been pressure rated in accordance with ASTM D2837 and PPI TR-3 having Hydrostatic Design Basis (HDB) of:

- 4000 psi at 72°F (23°C) as listed in PPI TR-4
- 1000 psi at 180°F (82.2°C) as listed in PPI TR-4



When compared to generic CPVC materials, fittings made from Corzan CPVC demonstrated improved creep resistance, and the ability to better withstand long-term, high-temperature hydrostatic pressure. These fittings lasted four times longer than those molded with other CPVC compounds when pressure tested at 180°F (82.2°C) at 551 psi.

Learn about how CPVC pipe pressure ratings are calculated in our resource article, "<u>How CPVC Pipe Pressure Ratings Are Calculated</u>."

## Corzan® CPVC Piping Pressure Ratings

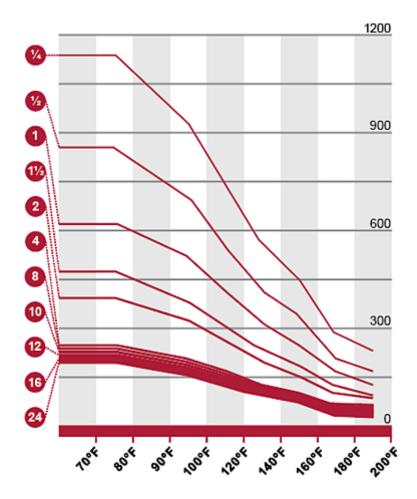
Corzan system pressure ratings are a function of pipe compound, pipe schedule, pipe size and operating temperatures. Corzan internal pressure ratings for CPVC 4120-05 schedule 80 and 40 pipe are listed below, as are collapse pressure ratings.

Schedule 80 CPVC (with Socket Fittings): Water Pressure Rating (psi)

Nominal Size (in)	70°F	80°F	90°F	100°F	120°F	140°F	160°F	180°F	200°F
1/4	1130	1130	1028	927	735	565	452	283	226
3/8	920	920	837	754	598	460	368	230	184
1/2	850	850	774	697	553	425	340	213	170
3/4	690	690	628	566	449	345	276	173	138
1	630	630	573	517	410	315	252	158	126
1 1/4	520	520	473	426	338	260	208	130	104
1 1/2	470	470	428	385	306	235	188	118	94
2	400	400	364	328	260	200	160	100	80
2 1/2	420	420	382	344	273	210	168	105	84
3	370	370	337	303	241	185	148	93	74
4	320	320	291	262	208	160	128	80	64
5	290	290	264	238	189	145	116	73	58
6	280	280	255	230	182	140	112	70	56
8	250	250	228	205	163	125	100	63	50
10	230	230	209	189	150	115	92	58	46
12	230	230	209	189	150	115	92	58	46
14	220	220	200	180	143	110	88	55	44
16	220	220	200	180	143	110	88	55	44
24	210	210	191	172	137	105	84	53	42

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Corzan Schedule 80 CPVC (1000 HDB) Maximum Working Pressure

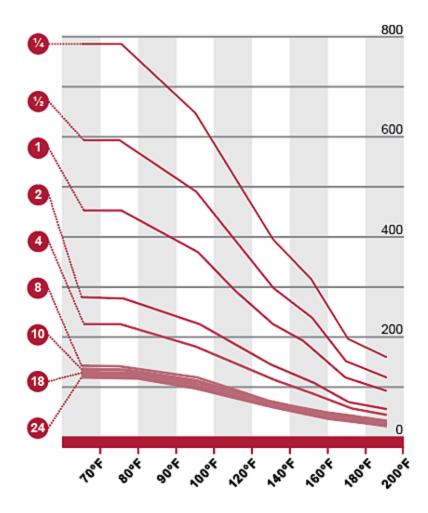


Schedule 40 CPVC: Water Pressure Rating (psi)

Nominal Size (in)	70°F	80°F	90°F	100°F	120°F	140°F	160°F	180°F	200°F
1/4	780	780	710	640	507	390	312	195	156
3/8	620	620	564	508	403	310	248	155	124
1/2	590	590	537	484	384	295	236	148	118
3/4	480	480	437	394	312	240	192	120	96
1	450	450	410	369	293	225	180	113	90
1 1/4	365	365	322	299	237	183	146	91	73
1 1/2	330	330	300	271	215	165	132	83	66
2	275	275	250	226	179	138	110	69	55
2 1/2	300	300	273	246	195	150	120	75	60
3	260	260	237	213	169	130	104	65	52
4	220	220	200	180	143	110	88	55	44
5	180	180	164	148	117	90	72	45	36
6	160	160	146	131	104	80	64	40	32
8	140	140	127	115	91	70	56	35	28
10	130	130	118	107	85	65	52	33	26
12	130	130	118	107	85	65	52	33	26
18	130	130	118	107	85	65	52	33	26
20	120	120	109	98	78	60	48	30	24
24	120	120	109	98	78	60	48	30	24

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Corzan Schedule 40 CPVC (1000 HDB) Maximum Working Pressure



Corzan CPVC Schedule 80 Collapse Pressure Rating (psi)

Nominal Size (in)	73°F	100°F	120°F	140°F	160°F	180°F	200°F
1/2	2006	1732	1459	1277	1094	1003	729
3/4	1740	1502	1265	1107	949	870	633
1	1628	1406	1184	1036	888	814	592
1 1/4	1399	1221	1028	900	771	707	514
1 1/2	1034	978	937	833	714	654	476
2	653	617	591	565	548	524	421
2 1/2	758	717	687	656	636	603	439
3	521	493	472	451	437	418	396
4	334	316	303	289	280	268	258
6	214	202	194	185	179	172	165
8	146	139	133	127	123	118	113
10	125	118	113	108	105	100	96
12	116	110	105	100	97	93	89

## **Corzan CPVC Schedule 40 Collapse Pressure Rating (psi)**

Nominal Size (in)	73°F	100°F	120°F	140°F	160°F	180°F	200°F
1/2	1605	1386	1167	1021	876	803	584
3/4	1219	1153	993	869	745	683	496
1	948	896	859	814	698	640	465
1 1/4	511	484	463	443	429	411	395
1 1/2	366	346	331	317	307	294	282
2	213	201	193	184	179	171	164
2 1/2	276	261	250	238	231	221	213
3	179	169	162	155	150	144	138
4	108	102	97	93	90	86	83
6	54	51	49	47	45	43	42
8	37	35	33	32	31	29	28
10	27	26	25	24	23	22	21
12	22	21	20	19	19	18	17