

**Table 82.40-4**  
**MAXIMUM ALLOWABLE LOAD FOR COPPER TUBING--TYPE K, ASTM B88; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)																													
	1/2"			3/4"			1"			1 1/4"			1 1/2"			2"			2 1/2"			3"			4"					
	WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU								
	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT			
0.5	0.5	-	0.5	1.5	-	1.5	3.5	-	3.5	6.5	-	8.0	10.5	4.0	14.0	22.0	7.0	35.0	39.0	28.0	83.0	62.0	80.0	185	132	437	538			
1	1.0	-	1.0	2.5	-	2.5	5.0	-	6.0	9.5	-	12.5	15.5	5.0	22.5	32.0	16.0	60.0	57.0	67.0	160	91.0	196	330	192	864	882			
2	1.0	-	1.0	3.5	-	3.5	7.5	-	9.5	14.0	4.5	20.0	22.0	7.0	35.0	47.0	42.0	116	83.0	160	290	132	437	538	279	1611	1611			
3	1.5	-	1.5	4.5	-	5.0	9.5	-	12.5	17.5	5.5	25.5	28.0	11.0	50.0	58.0	70.0	165	103	261	390	165	661	723	291	1725	1725			
4	2.0	-	2.0	5.0	-	6.0	11.5	4.0	15.5	20.5	6.5	31.0	32.0	16.0	60.0	68.0	100	215	116	338	455	165	665	726	NP					
5	2.0	-	2.0	6.0	-	7.0	13.0	4.5	18.0	23.0	7.5	37.0	36.0	22.0	73.0	75.0	128	250	NP			NP			NP					
6	2.5	-	2.5	6.5	-	8.0	14.0	4.5	20.0	25.0	8.5	42.0	40.0	30.0	86.0	NP			NP			NP			NP					
7	2.5	-	2.5	7.0	-	9.0	15.5	5.0	22.5	28.0	11.0	50.0	42.0	34.0	103	NP			NP			NP			NP					
8	3.0	-	3.0	7.5	-	9.5	16.5	5.5	24.0	30.0	13.5	55.0	NP			NP			NP			NP			NP					
9	3.0	-	3.0	8.0	-	10.0	17.5	5.5	25.5	NP			NP			NP			NP			NP			NP					
10	3.5	-	3.5	8.5	-	10.5	18.5	6.0	27.5	NP			NP			NP			NP			NP			NP					
11	3.5	-	3.5	9.0	-	11.5	19.0	6.0	28.5	NP			NP			NP			NP			NP			NP					
12	3.5	-	3.5	9.5	-	12.5	NP			NP			NP			NP			NP			NP			NP					
13	4.0	-	4.0	10.0	4.0	13.0	NP			NP			NP			NP			NP			NP			NP					
14	4.0	-	4.0	10.5	4.0	14.0	NP			NP			NP			NP			NP			NP			NP					
15	4.0	-	4.0	10.5	4.0	14.5	NP			NP			NP			NP			NP			NP			NP					
16	4.5	-	5.0	NP			NP			NP			NP			NP			NP			NP			NP					
17	4.5	-	5.0	NP			NP			NP			NP			NP			NP			NP			NP					
18	4.5	-	5.0	NP			NP			NP			NP			NP			NP			NP			NP					
19	5.0	-	6.0	NP			NP			NP			NP			NP			NP			NP			NP					
	NP			NP			NP			NP			NP			NP			NP			NP			NP			NP		

Note: WSFU means water supply fixture units.  
GPM means gallons per minute.  
FM means predominately flushometer type water closets or syphon jet urinals.  
FT means predominately flush tank type water closets or wash down urinals.  
NP means not permitted, velocities exceed 8 feet per second.  
For using this table, round the calculated pressure loss due to friction to the next higher number shown.  
Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

**Table 82.40-5  
MAXIMUM ALLOWABLE LOAD FOR COPPER TUBING-TYPE L , ASTM B88; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)																												
	1/2"			3/4"			1"			1 1/4"			1 1/2"			2"			2 1/2"			3"			4"				
	WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU				
	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM
0.5	0.5	-	0.5	2.0	-	2.0	4.0	-	4.0	7.0	-	9.0	11.0	4.0	15.0	23.0	7.5	37.0	40.0	30.0	86.0	65.0	90.0	200	136	462	561		
1	1.0	-	1.0	2.5	-	2.5	5.5	-	6.5	10.0	4.0	13.0	16.0	5.0	23.0	33.0	17.5	63.0	59.0	72.0	170	94.0	211	345	198	909	923		
2	1.5	-	1.5	4.0	-	4.0	8.5	-	10.5	14.5	4.5	20.5	23.0	7.5	37.0	48.0	44.0	120	86.0	175	305	137	468	566	288	1694	1694		
3	2.0	-	2.0	5.0	-	6.0	10.5	4.0	14.0	18.5	6.0	27.5	29.0	12.5	52.0	60.0	75.0	175	107	283	410	169	698	752	298	1792	1792		
4	2.0	-	2.0	6.0	-	7.0	12.0	4.0	16.5	21.5	7.0	33.0	34.0	18.5	66.0	70.0	108	225	119	356	469	NP			NP				
5	2.5	-	2.5	6.5	-	8.0	14.0	4.5	20.0	24.0	8.0	40.0	38.0	26.0	80.0	77.0	136	260	NP										
6	2.5	-	2.5	7.5	-	9.5	15.5	5.0	22.5	26.0	9.0	45.0	42.0	33.0	100	NP													
7	3.0	-	3.0	8.0	-	10.0	16.5	5.5	24.0	29.0	12.5	52.0	44.0	37.0	107	NP													
8	3.0	-	3.0	8.5	-	10.5	18.0	6.0	26.5	31.0	15.0	58.0	NP																
9	3.5	-	3.5	9.5	-	12.5	19.0	6.0	28.0	NP																			
10	3.5	-	3.5	10.0	4.0	13.0	20.0	6.5	30.0	NP																			
11	4.0	-	4.0	10.5	4.0	14.0	20.5	6.5	31.0	NP																			
12	4.0	-	4.0	11.0	4.0	15.0	NP																						
13	4.0	-	4.0	11.5	4.0	15.5	NP																						
14	4.5	-	5.0	12.0	4.0	16.5	NP																						
15	4.5	-	5.0	NP			NP																						
16	5.0	-	6.0	NP																									
17	5.0	-	6.0	NP																									
18	5.0	-	6.0	NP																									
19	5.0	-	6.0	NP																									
20	5.5	-	6.5	NP																									
	NP			NP																									

Note:WSFU means water supply fixture units.  
 GPM means gallons per minute.  
 FM means predominately flushometer type water closets or syphon jet urinals.  
 FT means predominately flush tank type water closets or wash down urinals.  
 NP means not permitted, velocities exceed 8 feet per second.  
 For using this table, round the calculated pressure loss due to friction to the next higher number shown.  
 Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

**Table 82.40-6  
MAXIMUM ALLOWABLE LOAD FOR COPPER TUBING-TYPE M, ASTM B88; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)																												
	1/2"			3/4"			1"			1 1/4"			1 1/2"			2"			2 1/2"			3"			4"				
	WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU				
	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM
0.5	0.5	-	0.5	2.0	-	2.0	4.0	-	4.0	7.0	-	9.0	11.5	4.0	15.5	23.0	7.5	37.0	42.0	33.0	100	67.0	96.0	210	139	481	577		
1	1.0	-	1.0	3.0	-	3.0	6.0	-	7.0	10.5	4.0	14.0	16.5	5.5	24.0	34.0	18.5	66.0	61.0	77.0	180	97.0	227	360	202	945	953		
2	1.5	-	1.5	4.5	-	5.0	9.0	-	11.5	15.5	5.0	22.5	24.0	8.0	40.0	50.0	48.0	128	88.0	184	315	141	493	588	294	1750	1750		
3	2.0	-	2.0	5.5	-	6.5	11.5	4.0	15.5	19.5	6.5	29.0	30.0	13.5	55.0	62.0	80.0	185	110	300	425	174	731	776	303	1835	1835		
4	2.5	-	2.5	6.5	-	8.0	13.0	4.5	18.0	22.0	7.0	35.0	35.0	20.0	70.0	73.0	120	240	121	374	484	NP			NP				
5	2.5	-	2.5	7.5	-	9.5	15.0	5.0	21.5	25.0	8.5	42.0	40.0	30.0	86.0	79.0	144	270	NP										
6	3.0	-	3.0	8.0	-	10.0	16.5	5.5	24.0	28.0	11.0	50.0	44.0	36.0	106	NP													
7	3.5	-	3.5	9.0	-	11.5	18.0	6.0	26.5	30.0	13.5	55.0	45.0	39.0	112														
8	3.5	-	3.5	9.5	-	12.5	19.5	6.5	29.0	32.0	17.0	62.0	NP																
9	4.0	-	4.0	10.0	4.0	13.0	20.5	6.5	31.0	NP																			
10	4.0	-	4.0	11.0	4.0	15.0	21.5	7.0	34.0																				
11	4.5	-	5.0	11.5	4.0	15.5	NP																						
12	4.5	-	5.0	12.0	4.0	16.5																							
13	5.0	-	6.0	12.5	4.5	17.5																							
14	5.0	-	6.0	12.5	4.5	18.0																							
15	5.0	-	6.0	NP																									
16	5.5	-	6.5																										
17	5.5	-	6.5																										
18	5.5	-	6.5																										
19	6.0	-	7.0																										
20	6.0	-	7.0																										
21	6.0	-	7.5																										
	NP																												

Note:WSFU means water supply fixture units.  
 GPM means gallons per minute.  
 FM means predominately flushometer type water closets or syphon jet urinals.  
 FT means predominately flush tank type water closets or wash down urinals.  
 NP means not permitted, velocities exceed 8 feet per second.  
 For using this table, round the calculated pressure loss due to friction to the next higher number shown.  
 Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

**Table 82.40-7  
MAXIMUM ALLOWABLE LOAD FOR GALVANIZED STEEL PIPE, SCHEDULE 40, ASTM A53; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)																													
	1/2"			3/4"			1"			1 1/4"			1 1/2"			2"			2 1/2"			3"			4"					
	WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU			WSFU					
	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT	GPM	FM	FT
0.5	0.5	-	0.5	1.5	-	1.5	3.5	-	3.5	7.0	-	9.0	11.0	4.0	15.0	21.0	7.0	32.0	34.0	18.5	66.0	60.0	75.0	175	123	381	490			
1	1.0	-	1.0	2.5	-	2.5	5.0	-	6.0	10.5	4.0	14.0	16.0	5.0	23.0	31.0	15.0	57.0	49.0	46.0	124	87.0	180	310	179	769	805			
2	1.5	-	1.5	4.0	-	4.0	7.5	-	9.5	15.5	5.0	22.5	23.0	7.5	37.0	45.0	38.0	110	72.0	116	235	127	406	511	260	1435	1435			
3	2.0	-	2.0	5.0	-	6.0	9.0	-	11.5	19.0	6.0	28.0	29.0	12.5	52.0	56.0	65.0	155	89.0	188	320	158	607	683	317	1966	1966			
4	2.5	-	2.5	5.5	-	6.5	11.0	4.0	15.0	22.0	7.0	35.0	34.0	18.5	66.0	65.0	90	200	104	266	395	184	809	837	NP					
5	3.0	-	3.0	6.5	-	8.0	12.0	4.0	16.5	25.0	8.5	42.0	38.0	26.0	80.0	74.0	124	245	118	350	465	NP			NP					
6	3.0	-	3.0	7.0	-	9.0	13.5	4.5	19.0	28.0	11.0	50.0	42.0	33.0	100	81.0	152	280	119	358	471	NP			NP					
7	3.5	-	3.5	7.5	-	9.5	14.5	4.5	20.5	30.0	13.5	55.0	46.0	40.0	113	83.0	163	293	NP			NP			NP					
8	4.0	-	4.0	8.0	-	10.0	16.0	5.0	23.0	33.0	17.5	63.0	49.0	46.0	124	NP			NP			NP			NP					
9	4.0	-	4.0	9.0	-	11.5	17.0	5.5	25.0	35.0	20.0	70.0	50.0	49.0	131	NP			NP			NP			NP					
10	4.5	-	5.0	9.5	-	12.5	18.0	6.0	26.5	37.0	24.0	76.0	NP			NP			NP			NP			NP					
11	4.5	-	5.0	10.0	4.0	13.0	19.0	6.0	28.0	37.0	24.0	77.0	NP			NP			NP			NP			NP					
12	5.0	-	6.0	10.5	4.0	14.0	19.5	6.5	29.0	NP			NP			NP			NP			NP			NP					
13	5.0	-	6.0	11.0	4.0	15.0	20.5	6.5	31.0	NP			NP			NP			NP			NP			NP					
14	5.0	-	6.0	11.0	4.0	15.0	21.5	7.0	33.0	NP			NP			NP			NP			NP			NP					
15	5.5	-	6.5	11.5	4.0	15.5	NP			NP			NP			NP			NP			NP			NP					
16	5.5	-	6.5	12.0	4.0	16.5	NP			NP			NP			NP			NP			NP			NP					
17	6.0	-	7.0	12.5	4.5	17.5	NP			NP			NP			NP			NP			NP			NP					
18	6.0	-	7.0	13.0	4.5	18.0	NP			NP			NP			NP			NP			NP			NP					
19	6.0	-	7.0	13.0	4.5	18.5	NP			NP			NP			NP			NP			NP			NP					
20	6.5	-	8.0	NP			NP			NP			NP			NP			NP			NP			NP					
21	6.5	-	8.0	NP			NP			NP			NP			NP			NP			NP			NP					
22	7.0	-	9.0	NP			NP			NP			NP			NP			NP			NP			NP					
23	7.0	-	9.0	NP			NP			NP			NP			NP			NP			NP			NP					
24	7.0	-	9.0	NP			NP			NP			NP			NP			NP			NP			NP					
25	7.5	-	9.5	NP			NP			NP			NP			NP			NP			NP			NP					
	NP			NP			NP			NP			NP			NP			NP			NP			NP			NP		

Note: WSFU means water supply fixture units.  
 GPM means gallons per minute.  
 FM means predominately flushometer type water closets or syphon jet urinals.  
 FT means predominately flush tank type water closets or wash down urinals.  
 NP means not permitted, velocities exceed 8 feet per second.  
 For using this table, round the calculated pressure loss due to friction to the next higher number shown.  
 Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

**Table 82.40-8  
 MAXIMUM ALLOWABLE LOAD FOR POLYBUTYLENE TUBING, ASTM D3309 and  
 CHLORINATED POLYVINYL CHLORIDE TUBING, ASTM D2846; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)																	
	1/2"			3/4"			1"			1 1/4"			1 1/2"			2"		
	GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU	
		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT
0.5	0.5	-	0.5	1.5	-	1.5	3.0	-	3.0	5.0	-	6.0	8.0	-	10.0	16.0	5.0	23.0
1	0.5	-	0.5	2.0	-	2.0	4.0	-	4.0	7.5	-	9.5	11.5	4.0	15.5	23.0	7.5	37.0
2	1.0	-	1.0	3.0	-	3.0	6.0	-	7.0	10.5	4.0	14.0	16.5	5.5	24.0	34.0	18.5	66.0
3	1.5	-	1.5	4.0	-	4.0	8.0	-	10.0	13.5	4.5	19.0	21.0	7.0	32.0	42.0	33.0	100
4	1.5	-	1.5	4.5	-	5.0	9.0	-	11.5	15.5	5.0	22.5	24.0	8.0	40.0	50.0	48.0	128
5	2.0	-	2.0	5.0	-	6.0	10.5	4.0	14.0	17.5	5.5	25.5	27.0	10.0	47.0	56.0	65.0	155
6	2.0	-	2.0	6.0	-	7.0	11.5	4.0	15.5	19.5	6.5	29.0	30.0	13.5	55.0	59.0	73.0	171
7	2.0	-	2.0	6.5	-	8.0	12.5	4.5	17.5	21.5	7.0	33.0	33.0	17.5	63.0	NP		
8	2.5	-	2.5	7.0	-	9.0	13.5	4.5	19.0	23.0	7.5	37.0	34.0	19.0	68.0	NP		
9	2.5	-	2.5	7.0	-	9.0	14.5	4.5	20.5	24.0	8.0	40.0	NP			NP		
10	2.5	-	2.5	7.5	-	9.5	15.0	5.0	21.5	24.0	8.0	41.0	NP			NP		
11	3.0	-	3.0	8.0	-	10.0	16.0	5.0	23.0	NP			NP			NP		
12	3.0	-	3.0	8.5	-	10.5	16.5	5.5	24.0	NP			NP			NP		
13	3.0	-	3.0	9.0	-	11.5	NP			NP			NP			NP		
14	3.0	-	3.0	9.5	-	12.5	NP			NP			NP			NP		
15	3.5	-	3.5	9.5	-	12.5	NP			NP			NP			NP		
16	3.5	-	3.5	10.0	4.0	13.0	NP			NP			NP			NP		
17	3.5	-	3.5	NP			NP			NP			NP			NP		
18	4.0	-	4.0	NP			NP			NP			NP			NP		
19	4.0	-	4.0	NP			NP			NP			NP			NP		
20	4.0	-	4.0	NP			NP			NP			NP			NP		
21	4.0	-	4.0	NP			NP			NP			NP			NP		
22	4.0	-	4.0	NP			NP			NP			NP			NP		
23	4.5	-	5.0	NP			NP			NP			NP			NP		
	NP			NP			NP			NP			NP			NP		

Note: WSFU means water supply fixture units.  
 GPM means gallons per minute.  
 FM means predominately flushometer type water closets or syphon jet urinals.  
 FT means predominately flush tank type water closets or wash down urinals.  
 NP means not permitted, velocities exceed 8 feet per second.  
 For using this table, round the calculated pressure loss due to friction to the next higher number shown.  
 Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

**Table 82.40-9**  
**MAXIMUM ALLOWABLE LOAD FOR CROSSLINKED POLYETHYLENE (PEX) TUBING,**  
**ASTM F876 and F877; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)																				
	1/2"			5/8"			3/4"			1"			1 1/4"			1 1/2"			2"		
	GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU	
		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT
0.5	0.5	-	0.5	0.5	-	0.5	1.0	-	1.0	2.5	-	2.5	4.0	-	4.0	6.5	-	8.0	13.5	4.5	19.0
1	0.5	-	0.5	1.0	-	1.0	1.5	-	1.5	3.5	-	3.5	6.0	-	7.0	9.5	-	12.5	19.5	6.5	29.0
2	1.0	-	1.0	1.5	-	1.5	2.5	-	2.5	5.0	-	6.0	9.0	-	11.5	14.0	4.5	20.0	28.0	11.0	50.0
3	1.0	-	1.0	2.0	-	2.0	3.0	-	3.0	6.5	-	8.0	11.0	4.0	15.0	17.5	5.5	25.5	36.0	22.0	73.0
4	1.5	-	1.5	2.5	-	2.5	4.0	-	4.0	7.5	-	9.5	13.0	4.5	18.0	20.5	6.5	31.0	42.0	33.0	100
5	1.5	-	1.5	3.0	-	3.0	4.5	-	5.0	8.5	-	10.5	15.0	5.0	21.5	23.0	7.5	37.0	47.0	42.0	116
6	2.0	-	2.0	3.0	-	3.0	5.0	-	6.0	9.5	-	12.5	16.5	5.5	24.0	25.0	8.5	42.0	51.0	53.0	135
7	2.0	-	2.0	3.5	-	3.5	5.5	-	6.5	10.5	4.0	14.0	18.0	6.0	26.5	28.0	11.0	50.0	NP		
8	2.0	-	2.0	3.5	-	3.5	5.5	-	6.5	11.0	4.0	15.0	19.0	6.0	28.0	30.0	13.5	55.0	NP		
9	2.5	-	2.5	4.0	-	4.0	6.0	-	7.0	12.0	4.0	16.5	20.5	6.5	31.0	NP			NP		
10	2.5	-	2.5	4.0	-	4.0	6.5	-	8.0	12.5	4.5	17.5	21.5	7.0	34.0	NP			NP		
11	2.5	-	2.5	4.5	-	5.0	7.0	-	9.0	13.5	4.5	19.0	NP			NP			NP		
12	2.5	-	2.5	4.5	-	5.0	7.0	-	9.0	14.0	4.5	20.0	NP			NP			NP		
13	3.0	-	3.0	5.0	-	6.0	7.5	-	9.5	14.5	4.5	20.5	NP			NP			NP		
14	3.0	-	3.0	5.0	-	6.0	8.0	-	10.0	NP			NP			NP			NP		
15	3.0	-	3.0	5.5	-	6.5	8.0	-	10.0	NP			NP			NP			NP		
16	3.0	-	3.0	5.5	-	6.5	8.5	-	10.5	NP			NP			NP			NP		
17	3.5	-	3.5	5.5	-	6.5	8.5	-	11.0	NP			NP			NP			NP		
18	3.5	-	3.5	6.0	-	7.0	NP			NP			NP			NP			NP		
19	3.5	-	3.5	6.0	-	7.0	NP			NP			NP			NP			NP		
20	3.5	-	3.5	6.0	-	7.5	NP			NP			NP			NP			NP		
21	4.0	-	4.0	NP			NP			NP			NP			NP			NP		

Note: WSFU means water supply fixture units.  
 GPM means gallons per minute.  
 FM means predominately flushometer type water closets or syphon jet urinals.  
 FT means predominately flush tank type water closets or wash down urinals.  
 NP means - not permitted, velocities exceed 8 feet per second.  
 For using this table, round the calculated pressure loss due to friction to the next higher number shown.  
 Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

**Table 82.40-10  
MAXIMUM ALLOWABLE LOAD FOR CHLORINATED POLYVINYL CHLORIDE TUBING, ASTM F442; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)																				
	3/4"			1"			1 1/4"			1 1/2"			2"			2 1/2"			3"		
	GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU	
		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT
0.5	2.5	-	2.5	4.5	-	5.0	9.0	-	11.5	13.0	4.5	18.0	23.0	7.5	37.0	38.0	26.0	80.0	65.0	90.0	200
1	3.5	-	3.5	7.0	-	9.0	13.0	4.5	18.0	18.5	6.0	27.5	34.0	18.5	66.0	56.0	65.0	155	94.0	211	345
2	5.5	-	6.5	10.0	4.0	13.0	19.0	6.0	28.0	27.0	10.0	47.0	49.0	46.0	124	82.0	156	285	138	475	572
3	7.0	-	9.0	12.5	4.5	17.5	23.0	7.5	37.0	34.0	18.5	66.0	62.0	80.0	185	102	255	385	170	703	755
4	8.0	-	10.0	15.0	5.0	21.5	27.0	10.0	47.0	40.0	30.0	86.0	72.0	116	235	114	331	449	NP		
5	9.0	-	11.5	16.5	5.5	24.0	31.0	15.0	57.0	45.0	38.0	110	78.0	142	267	NP					
6	10.0	4.0	13.0	18.5	6.0	27.5	34.0	18.5	66.0	49.0	46.0	124	NP								
7	11.0	4.0	15.0	20.0	6.5	30.0	37.0	24.0	76.0	50.0	48.0	128									
8	11.5	4.0	15.5	21.5	7.0	33.0	38.0	26.0	80.0	NP											
9	12.5	4.5	17.5	23.0	7.5	37.0	NP														
10	13.0	4.5	18.0	23.0	7.5	39.0															
11	14.0	4.5	20.0	NP																	
12	14.5	4.5	20.5																		
13	14.5	5.0	21.5																		
	NP																				

Note: WSFU means water supply fixture units.  
 GPM means gallons per minute.  
 FM means predominately flushometer type water closets or syphon jet urinals.  
 FT means predominately flush tank type water closets or wash down urinals.  
 NP means not permitted, velocities exceed 8 feet per second.  
 For using this table, round the calculated pressure loss due to friction to the next higher number shown.  
 Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

**Table 82.40-11  
MAXIMUM ALLOWABLE LOAD FOR POLYETHYLENE ALUMINUM POLYETHYLENE TUBING (PexAlPex), ASTM F1281; (C=150)**

Pressure Loss Due to Friction (in lbs. per 100 ft. of Length)	Pipe Diameter (in inches)											
	1/2"			5/8"			3/4"			1"		
	GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU	
		FM	FT		FM	FT		FM	FT		FM	FT
0.5	0.5	-	0.5	1.0	-	1.0	2.0	-	2.0	4.0	-	4.0
1	0.5	-	0.5	1.5	-	1.5	3.0	-	3.0	6.0	-	7.0
2	1.0	-	1.0	2.0	-	2.0	4.5	-	5.0	8.5	-	10.5
3	1.5	-	1.5	3.0	-	3.0	5.5	-	6.5	10.5	4.0	14.0
4	1.5	-	1.5	3.5	-	3.5	6.5	-	8.0	12.5	4.5	17.5
5	2.0	-	2.0	4.0	-	4.0	7.0	-	9.0	14.0	4.5	20.0
6	2.0	-	2.0	4.0	-	4.0	8.0	-	10.0	15.5	5.0	22.5
7	2.5	-	2.5	4.5	-	5.0	8.5	-	10.5	17.0	5.5	25.0
8	2.5	-	2.5	5.0	-	6.0	9.5	-	12.5	18.0	6.0	26.5
9	2.5	-	2.5	5.5	-	6.5	10.0	4.0	13.0	19.5	6.5	29.0
10	3.0	-	3.0	5.5	-	6.5	10.5	4.0	14.0	20.5	6.5	31.0
11	3.0	-	3.0	6.0	-	7.0	11.0	4.0	15.0	20.5	6.5	32.0
12	3.0	-	3.0	6.0	-	7.0	11.5	4.0	15.5	NP		
13	3.5	-	3.5	6.5	-	8.0	12.5	4.5	17.5	NP		
14	3.5	-	3.5	7.0	-	9.0	NP					
15	3.5	-	3.5	7.0	-	9.0						
16	3.5	-	3.5	7.5	-	9.5	NP					
17	4.0	-	4.0									
18	4.0	-	4.0	Note: WSFU means water supply fixture units. GPM means gallons per minute. FM means predominately flushometer type water closets or syphon jet urinals. FT means predominately flush tank type water closets or wash down urinals. NP means not permitted, velocities exceed 8 feet per second. For using this table, round the calculated pressure loss due to friction to the next higher number shown. Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.								
19	4.0	-	4.0									
20	4.0	-	4.0									
21	4.5	-	5.0									
	NP											