



CONDUIT FILL TABLE

This conduit fill table is used to determine how many wires can be safely put into non-PVC conduit tubing or pipe. Each row going across is a different size and type of conduit, either EMT, IMC, or galvanized pipe (rigid metal conduit, RMC). Each column (going up and down) is a different gauge of wire. The results show the allowable number of wires for each size/type of conduit and wire, based on the 2020 NEC code.

Trade Size in Inches		Wire Size (THWN, THHN) Conductor Size AWG/kcmil																				
		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500	600	700	750
1/2	1/2 in EMT	12	9	5	3	2	1	1	1	1	1											
	1/2 in IMC	14	10	6	3	2	1	1	1	1	1	1										
	1/2 in GALV	13	9	6	3	2	1	1	1	1	1											
3/4	3/4 in EMT	22	16	10	6	4	2	1	1	1	1	1	1									
	3/4 in IMC	24	17	11	6	4	3	2	1	1	1	1	1	1								
	3/4 in GALV	22	16	10	6	4	2	1	1	1	1	1	1	1								
1	1 in EMT	35	26	16	9	7	4	3	3	1	1	1	1	1	1	1						
	1 in IMC	39	29	18	10	7	4	4	3	2	1	1	1	1	1	1	1					
	1 in GALV	36	26	17	9	7	4	3	3	1	1	1	1	1	1	1	1					
1-1/4	1 1/4 in EMT	61	45	28	16	12	7	6	5	4	3	2	1	1	1	1	1	1	1	1	1	
	1 1/4 in IMC	68	49	31	18	13	8	6	5	4	3	3	2	1	1	1	1	1	1	1	1	1
	1 1/4 in GALV	63	46	29	16	12	7	6	5	4	3	2	1	1	1	1	1	1	1	1	1	
1-1/2	1 1/2 in EMT	84	61	38	22	16	10	8	7	5	4	3	3	2	1	1	1	1	1	1	1	1
	1 1/2 in IMC	91	67	42	24	17	11	9	7	5	4	4	3	2	1	1	1	1	1	1	1	1
	1 1/2 in GALV	85	62	39	22	16	10	8	7	5	4	3	3	2	1	1	1	1	1	1	1	1
2	2 in EMT	138	101	63	36	26	16	13	11	8	7	6	5	4	3	3	2	1	1	1	1	1
	2 in IMC	149	109	69	39	28	17	15	12	9	8	6	5	4	3	3	2	2	1	1	1	1
	2 in GALV	140	102	64	37	27	16	14	11	8	7	6	5	4	3	3	2	2	1	1	1	1
2-1/2	2 1/2 in EMT	241	176	111	64	46	28	24	20	15	12	10	8	7	6	5	4	4	3	2	2	1
	2 1/2 in IMC	211	154	97	56	40	25	21	17	13	11	9	7	6	5	4	4	3	3	2	1	1
	2 1/2 in GALV	200	146	92	53	38	23	20	17	12	10	8	7	6	5	4	3	3	2	1	1	1
3	3 in EMT	364	266	167	96	69	43	36	30	22	19	16	13	11	9	7	6	6	5	4	3	3
	3 in IMC	326	238	150	86	62	38	32	27	20	17	14	12	9	8	7	6	5	4	3	3	3
	3 in GALV	309	225	142	82	59	36	31	26	19	16	13	11	9	7	6	5	5	4	3	3	3
3-1/2	3 1/2 in EMT	476	347	219	126	91	56	47	40	29	25	20	17	14	11	10	9	8	6	5	4	4
	3 1/2 in IMC	436	318	200	115	83	51	43	36	27	23	19	16	13	10	9	8	7	6	5	4	4
	3 1/2 in GALV	412	301	189	109	79	48	41	34	25	21	18	15	12	10	8	7	7	5	4	4	4
4	4 in EMT	608	443	279	161	116	71	60	51	37	32	26	22	18	15	13	11	10	8	7	6	5
	4 in IMC	562	410	258	149	107	66	56	47	35	29	24	20	17	13	12	10	9	7	6	5	5
	4 in GALV	531	387	244	140	101	62	53	44	33	27	23	19	16	13	11	10	8	7	6	5	5

Above information referenced from tables C1, C4, and C8 in the National Electric Code of 2017.

For more information on the following types of conduit, please see the table listed below in the appendix C of the National Electric Code of 2017.

Rigid PVC Conduit, Schedule 80 -- Table C9

Rigid PVC Conduit, Schedule 40 -- Table C10

Flexible Metallic Conduit -- Table C3

Liquidtight Flexible Metallic Conduit -- Table C7

Liquidtight Flexible Nonmetallic Conduit (Type FNMC-B)-- Table C5