



CONDUIT WIRE FILL CHART

Per National Electric Code* to Dimensions of
Zero Ground dBzSHIELD® Shield Flexible Conduit

U.S. TRADE SIZE	INTERNAL DIAMETER INCH	TOTAL CONDUIT AREA 100% sq. inch	NUMBER OF WIRES AND MAXIMUM ALLOWED PERCENTAGE OF FILL		
			2 Wires 31% sq.inch	Over 2 Wires 40% sq.inch	1 Wire 53% sq.inch
3/8	0.484	0.192	0.060	0.077	0.102
1/2	0.622	0.314	0.097	0.126	0.166
3/4	0.820	0.541	0.168	0.216	0.287
1	1.041	0.872	0.270	0.349	0.462
1 1/4	1.380	1.528	0.474	0.611	0.810
1 1/2	1.575	1.979	0.613	0.792	1.049
2	2.020	2.033	1.006	1.298	1.720
2 1/2	2.480	2.493	1.512	1.952	2.586
3	3.070	3.085	2.317	2.990	3.962
4	4.000	4.020	3.935	5.077	6.727

*Refer to NEC 2008, Chapter 9 for more information. This chart is reprinted as a guide only.

Preparation and Tools for Cutting Flexible Metallic Conduits

Cutting Flexible Conduits. Proper cutting methods for flexible conduits are important to ensure a sealed connection when assembled with intended fittings. A clean, square cut is necessary for establishing a good connection for continuity of the ground between the metallic conduit core and conduit fitting grounding ferrule.

Hand Cutting in field. When using a hand held hack saw, care should be taken to make a square clean cut. For best results, a blade having 24 to 32 teeth per inch with no-set is recommended. Several commercial vises are available for smaller sizes. Apply reinforced tape around the circumference of the conduit and cut directly through the middle of the tape. This will reduce the possibility of flaring the ends while cutting. Check the cut, debur sharp edges as necessary prior to attachment of fitting.



Machine Cutting. Cutting by machine when available is preferable for large sizes and when numerous cuts are required. Use of a jig to maintain a square cut is highly recommended. Apply tape prior to cutting, and debur after cutting as above.