



APPROXIMATE WEIGHTS

100W	10 LBS
150W	11 LBS
250W	13 LBS
500W	19 LBS
750W	19 LBS
1000W	28 LBS

100, 150, 250 WATT	6-1/4" WIDE	4-5/8" DEEP	6-3/4" LONG
500 WATT	7" WIDE	5-1/4" DEEP	8-1/4" LONG
750 WATT	6-1/4" WIDE	4-3/4" DEEP	8-3/4" LONG
1000 WATT	7" WIDE	5-1/4" DEEP	10-1/4" LONG

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Transformer Secondary Wire Length (In Feet) For Low Voltage Lighting Applications

12 VOLT SYSTEM

Wire Size (Gauge)	WATTS (VA) Per Circuit														
	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300
Maximum Secondary Wire Length in Feet															
14	75	37	25	19	15	12	11	9	8						
12	118	59	39	30	24	20	17	15	13	12	11	10			
10	188	94	63	47	38	31	27	24	21	19	17	16	14	13	13
8	299	149	100	75	60	50	43	37	33	30	27	25	23	21	20
6	476	238	159	119	95	79	68	60	53	48	43	40	37	34	32

Voltage drop is inherent in all electrical systems. Make cable runs as short as possible from the transformers; this will decrease voltage drop and supply proper current to the fixtures. You must use a transformer that has a total wattage rating which is greater than the sum of the watts consumed by the Roberts Step-Lite fixtures. Resistance in the wire can cause voltage drop; the wire gauge must be properly chosen. This resistance affects lamp voltage and thus light output and color, and it is more noticeable in longer wiring runs. The wire length chart above show the maximum wiring runs for various circuit loads.

24 VOLT SYSTEM

Wire Size (Gauge)	WATTS (VA) Per Circuit																									
	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500	
Maximum Secondary Wire Length in Feet																										
14	150	75	50	37	30	25	21	19	17	15	14	12	12	11	10	9	9	8								
12	237	118	79	59	47	39	43	30	26	24	22	20	18	17	16	5	14	13	12	12	11	11	10	10		
10	376	188	125	94	75	63	54	47	42	38	34	31	29	27	25	24	22	21	20	19	18	17	16	16	15	
8	597	299	199	149	119	100	85	75	66	60	54	50	46	43	40	37	35	33	31	30	28	27	26	25	24	
6	952	476	317	238	190	159	136	119	106	95	87	79	73	68	63	60	56	53	50	48	45	43	41	40	38	

Most remotely powered lighting fixtures will have separate power feeds (separate pair of wires) terminating at the transformer. In order to avoid potential hazards of overloading the secondary wiring, the wire gauge must be properly chosen. This is accomplished by using the amperage size of the circuit breaker or protection device on the secondary side of the transformer to determine minimum required wire gauge for each run.



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