

Table 3: Wire Size Program								
Number of Branches				3				
Line voltage				277 VAC				
Maximum allowable voltage drop				3%				
Circuit A-2								
	Branch #1	Load (Amps)	Distance		Circuit A-7	Branch #1	Load (Amps)	Distance
	1 18-6.1	1.8	920			1 18-17.1	1.8	910
	2 18-3.1	1.8	645			2 18-14.1	1.8	200
	Branch #2	Load (Amps)				Branch #2	Load (Amps)	
	1 18-11.1	1.8	910			1 18-HM1.1(1)	1.8	410
	2 18-8.1	1.8	265			2 18-25.1	1.8	915
						3 18-22.1	1.8	700
	Branch #3	Load (Amps)				Branch #3	Load (Amps)	
	1	7.2	220			1	9	20
Required wire size: #4 AWG					Required wire size: #6 AWG			
Circuit B-4								
	Branch #1	Load (Amps)	Distance		Circuit B-3	Branch #1	Load (Amps)	Distance
	1 18-4.1	1.8	915			1 18-18.1	1.8	960
	2 18-1.1	1.8	40			2 18-15.1	1.8	500
	Branch #2	Load (Amps)				Branch #2	Load (Amps)	
	1 18-13.1	1.8	870			1 18-HM1.1(2)	1.8	715
	2 18-10.1	1.8	865			2 18-24.1	1.8	910
						3 18-21.1	1.8	400
	Branch #3	Load (Amps)				Branch #3	Load (Amps)	
	1	7.2	220			1	9	20
Required wire size: #4 AWG					Required wire size: #8 AWG			
Circuit C-6								
	Branch #1	Load (Amps)	Distance		Circuit C-5	Branch #1	Load (Amps)	Distance
	1 18-5.1	1.8	905			1 18-19.1	1.8	1005
	2 18-2.1	1.8	340			2 18-16.1	1.8	800
	Branch #2	Load (Amps)				Branch #2	Load (Amps)	
	1 18-12.1	1.8	920			1 18-HM1.1(3)	1.8	1015
	2 18-9.1	1.8	565			2 18-23.1	1.8	910
						3 18-20.1	1.8	100
	Branch #3	Load (Amps)				Branch #3	Load (Amps)	
	1	7.2	220			1	9	20
Required wire size: #4 AWG					Required wire size: #6 AWG			