# TYPICAL DAY: WORKPLACE CHARGING 4 HOUR SESSIONS

## **ASSUMPTIONS**

- 1. ALL PORTS ARE OCCUPIED AND ACTIVELY CHARGING.
- 2. UTILIZE WAITLIST FEATURE TO TURNOVER SPOTS AFTER SESSION COMPLETION WITH

TO ADD'L CHARGEPOINT

**EV CHARGING STATIONS** 

REFER TO ELECTRICAL DRAWINGS FOR QTY OF CKTS

- 3. MINIMUM OUTPUT PER PORT NOT TO DROP BELOW 16A.
- 4. (5) PORTS PER 100A CIRCUIT (80A CONTINUOUS LOAD).

# CHARGEPOINT WAITLIST

- INCLUDED WITH ALL CHARGEPOINT CLOUD PLANS
- WHEN ALL CHARGING SPOTS AT A LOCATION ARE BUSY, DRIVERS CAN "GET IN LINE" THROUGH THE CHARGEPOINT MOBILE APP.
- DRIVERS ARE NOTIFIED WHEN A CHARGING SPOT BECOMES AVAILABLE, AND GIVES THEM TIME TO GO PLUG IN.
- SPOTS OFFERED ON A FIRST-COME, FIRST SERVED BASIS NO ONE SKIPS THE LINE.
- CAN INCREASE STATION UTILIZATION BY UP TO 45%.

# MOVE INCENTIVES

- OPERATORS SET TIME TO MOVE POLICIES, WHICH SET THE AMOUNT OF TIME DRIVERS HAVE TO MOVE THEIR VEHICLE AFTER BEING NOTIFIED THEIR SESSION HAS ENDED.
- CHARGEPOINT WILL AUTOMATICALLY RECORD A "FAILURE TO MOVE" EVENT IN THE SOFTWARE - NO ADDITIONAL ACTION IS TAKEN BY CHARGEPOINT.
- OPERATORS MAY SET POLICIES CHARGING DRIVERS OVERSTAY FEES IF THEY DO NOT MOVE THEIR VEHICLE WITHIN THE TIME TO MOVE WINDOW.

UP TO (10) CARS CAN RECEIVE ~40 MILES OF ADDED RANGE EACH IN A TYPICAL WORKDAY, PER 100A CIRCUIT.

ESTIMATED RANGE PER HOUR	10 MILES
DWELL TIME	4 HOURS
AVERAGE RANGE ADDED PER SESSION	40 MILES

## CHARGEPOINT POWER MANAGEMENT

## HIERARCHICAL POWER MANAGEMENT

TYPICAL JBOX / PULL BOX

AS REQUIRED (F.B.O.)

- ENABLES OVERSUBSCRIPTION OF TRANSFORMERS, PANELS, AND / OR CIRCUITS.
- ELIMINATES NEED FOR EXTERNAL LOAD MANAGEMENT DEVICES IN UPSTREAM ELECTRICAL INFRASTRUCTURE.
- MEETS STANDARDS SET BY NEC 625.42 FOR LOAD MANAGEMENT



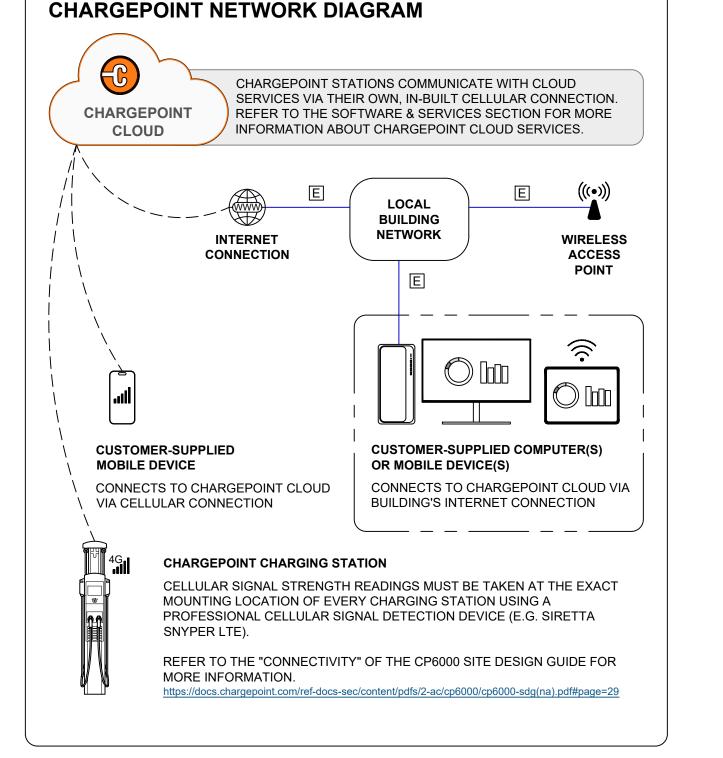




# RECOMMENDED EQUIPMENT SIZES

RECOMMEND			RECOMMENDED MAIN BREAKER SIZING WITH PANEL-LEVEL POWER MANAGEMENT				
TRANSFORME WITH SITE-			PANEL VOLTA	208 Y / 120 V			
POWER MANA	GEMENT		BRANCH CIRCUIT BREAKER (PER PORT):			2-POLE, 100A	
TRANSFORMER RATING (kVA)	MAX QTY OF PORTS		MCB RATING (A)	MAX QTY OF PORTS	MAX AMPS PER PORT	MIN AMPS PER PORT	
30	9		125	10	80 A	16 A	
45	13		200	17			
75	22		225	19			
112.5	33		400	34			
150	45		600	51			
225	67		800	68			
300	90					•	
500	150						
750	225						

TRANSFORMER AND BREAKER SIZES SHOWN IN ABOVE TABLES ARE RECOMMENDATIONS. E.E. AND/OR E.C. TO VERIFY ELECTRICAL SPECIFICATIONS MEET CODE REQUIREMENTS. RECOMMENDATIONS ABOVE MAINTAIN A MINIMUM OUTPUT OF > 3.3 kW PER PORT @ 208 V~.



## TYPICAL DAY: WORKPLACE CHARGING 8 HOUR SESSIONS

- ALL PORTS ARE OCCUPIED AND ACTIVELY CHARGING.
- 2. MINIMUM OUTPUT PER PORT NOT TO DROP BELOW 16A. 3. (5) PORTS PER 100A CIRCUIT (80A CONTINUOUS LOAD).

UP TO (5) CARS CAN RECEIVE ~80 MILES OF ADDED RANGE EACH IN A TYPICAL WORKDAY, PER 100A CIRCUIT.

ESTIMA	TED RANGE PER HOUR	10 MILES
DWELL	TIME	8 HOURS
AVERA	GE RANGE ADDED PER SESSION	N 80 MILES

### **ESTIMATED RANGE PER HOUR (RPH)** SHARED CIRCUIT - CIRCUIT LEVEL POWER MANAGEMENT REQUIRED

**PANEL VOLTAGE:** 208 Y / 120 V, 3P4W

PER PORT		PORT	MPDAY₄	MPDAY <sub>8</sub>	
Α	kW	(MILES)	,	,	
80	16.64	50	200	399	
40	8.32	25	100	200	
27	5.55	17	67	133	
20	4.16	12	50	100	
	80 40 27	A         kW           80         16.64           40         8.32           27         5.55	A         kW         (MILES)           80         16.64         50           40         8.32         25           27         5.55         17	A         kW         (MILES)           80         16.64         50         200           40         8.32         25         100           27         5.55         17         67	

5 | 16 | 3.33 | 10 | 40 | 80

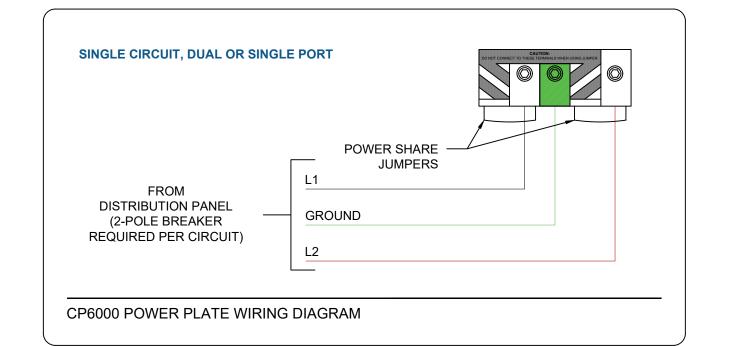
**MPDAY**<sub>4</sub> = RANGE ADDED IN 4 HOURS

**MPDAY**<sub>8</sub> = RANGE ADDED IN 8 HOURS

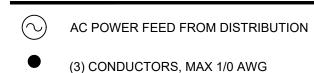
### MILES / KWH). ACTUAL RPH MAY VARY BASED ON VEHICLE MAKE AND MODEL BRANCH CIRCUIT BREAKER: 2-POLE, 100 A ADDITIONAL REDUCTIONS IN RPH \_\_\_ OUTPUT RPH PER MAY OCCUR DUE TO PANEL AND SITE-LEVEL POWER MANAGEMENT. MPDAY/4 AND MPDAY/8 ARE CALCULATED AS THE WORST CASE SCENARIO, ASSUMING ALL PORTS ARE CONNECTED AND ACTIVELY CHARGING.

ESTIMATED RPH BASED ON AVG.

PASSENGER CAR EFFICIENCY (~3



## **LEGEND**



ETHERNET CONNECTION

4G LTE CELLULAR CONNECTION



CHARGEPOINT CLOUD SERVICES

SAE J3400 (NACS) CONNECTOR

## **GENERAL NOTES**

SAE J1772 CONNECTOR

- 1. ALL OVERCURRENT PROTECTION DEVICES, CONDUCTORS, AND CONDUIT SIZES PROVIDED ON THIS DRAWING ARE PROVIDED BY CHARGEPOINT FOR REFERENCE ONLY. SITE SPECIFIC WIRE SIZING SHALL BE PERFORMED BY THE INSTALLATION CONTRACTOR TAKING INTO ACCOUNT LOCAL CONDITIONS AND CODES / STANDARDS.
- 2. CHARGEPOINT PRODUCTS TO BE INSTALLED BY A LICENSED CONTRACTOR WITH CHARGEPOINT INSTALLER CERTIFICATIONS.
- 3. FOR MORE INFORMATION ABOUT CHARGEPOINT'S CP6000 LEVEL 2 AC CHARGER, REFER TO THE FOLLOWING LINKS:
- $\bullet \ \ CP6000 \ \ DATASHEET: \underline{\ \ https://docs.chargepoint.com/ref-docs-sec/content/pdfs/2-ac/cp6000/cp6000-ds\_commercial(na).pdf}$

• CP6000 SITE DESIGN GUIDE: <a href="https://docs.chargepoint.com/ref-docs-sec/content/pdfs/2-ac/cp6000/cp6000-sdg(na).pdf">https://docs.chargepoint.com/ref-docs-sec/content/pdfs/2-ac/cp6000/cp6000-sdg(na).pdf</a>

• INSTALLATION GUIDES AVAILABLE TO CERTIFIED INSTALLERS: https://www.chargepoint.com/partners/training-certification

## **SOFTWARE & SERVICES**

### **CHARGEPOINT CLOUD PLANS**

ALL CP6000 STATIONS REQUIRE AN ACTIVE CHARGEPOINT CLOUD PLAN. EITHER A COMMERCIAL CLOUD PLAN OR AN ENTERPRISE CLOUD PLAN IS REQUIRED PER CHARGING PORT.

FOR MORE INFORMATION ON CLOUD PLAN FEATURES, SEE TABLE BELOW AND VISIT:  $\underline{\text{https://www.chargepoint.com/download-file/cp-cloud-plans-comparison-matrix-commercial}}$ 

COMMERCIAL CLOUD PLAN RECOMMENDED • ORDER CODE: CPCLD-COMMERCIAL-n\* \*REPLACE "n" WITH DESIRED YEARS OF SERVICE (1, 2, 3, 4, OR 5 YEARS)

**ENTERPRISE CLOUD PLAN** • ORDER CODE: CPCLD-ENTERPRISE-n\* \*REPLACE "n" WITH DESIRED YEARS OF SERVICE (1, 2, 3, 4, OR 5 YEARS)

CATEGORY	PLAN FEATURE	COMMERCIAL PLAN	ENTERPRISE PLAN
GENERAL SUPPORT	4G LTE CELLULAR NETWORK CONNECTION	<b>~</b>	<b>~</b>
	BASIC API ACCESS	<b>~</b>	<b>~</b>
	24/7 SUPPORT FOR STATION HOSTS & DRIVERS	<b>~</b>	<b>~</b>
	STATION SOFTWARE UPDATES	<b>~</b>	<b>~</b>
	REAL-TIME STATION STATUS	<b>~</b>	<b>~</b>
	AGGREGATED REPORTING & ANALYTICS	<b>~</b>	<b>~</b>
STATION MANAGEMENT	USER MANAGEMENT & ADMINISTRATIVE TOOLS	<b>~</b>	<b>~</b>
	VALET DASHBOARD	<b>~</b>	<b>✓</b>
	ON-STATION VIDEO UPLOADS	<b>~</b>	<b>~</b>
	STATION MESSAGES	<b>✓</b>	<b>~</b>
BASIC POWER	POWER SHARING AT CIRCUIT, PANEL, & SITE LEVELS	<b>~</b>	<b>~</b>
	CABLE SHARING (AC ONLY)	<b>~</b>	<b>~</b>
MANAGEMENT	FIXED POWER DERATING (AC ONLY)	<b>~</b>	<b>~</b>
	HIERARCHICAL POWER SHARING	<b>✓</b>	<b>~</b>
	DRIVER MOBILE APP & WEB PORTAL	<b>~</b>	<b>~</b>
	ACCESS CONTROL	<b>~</b>	<b>~</b>
	PRICING CONTROL	<b>~</b>	<b>~</b>
	CONNECTIONS	<b>~</b>	<b>~</b>
DRIVER MANAGEMENT	NOTIFY ME WHEN AVAILABLE	<b>~</b>	<b>~</b>
	WAITLIST	<b>~</b>	<b>~</b>
	SHOW STATIONS ON CHARGEPOINT NETWORK MAP	<b>~</b>	<b>~</b>
	EV CHARGING NETWORK ROAMING	<b>~</b>	<b>~</b>
	TAP TO CHARGE	<b>~</b>	<b>~</b>
ADVANCED	API SUPPORTING DEMAND MANAGEMENT		<b>~</b>
POWER	TIME OF USE POWER SHARING		<b>~</b>
MANAGEMENT	REPORTING ON METER DATA AND ADVANCED ANALYTI	ics	<b>~</b>

# **INSTALLATION & ACTIVATION**

INSTALLATION	REQUIRED
INSTALLATION TO BE COMPLETE ENTITY HOLDING THE CP6000 IN MICROCREDENTIAL* FROM CHAIUNIVERSITY.	STALLATION

**ACTIVATION** 

• ORDER CODE: CP-ACTIVATION • REQUIRED FOR ALL CP6000 STATIONS. INCLUDES ACTIVATION OF STATIONS BY A CHARGEPOINT REMOTE SERVICES TECHNICIAN.

\* CHARGEPOINT RECOMMENDS SELECTING ( A CHARGEPOINT AC CERTIFIED INSTALLER.

# CHARGEPOINT ASSURE®

- ORDER CODE: CP6000-ASSURE-n\*
- INCLUDES PARTS COSTS AND LABOR COSTS FOR ISSUES COVERED UNDER WARRANTY • INCLUDES LABOR AND TRAVEL COVERAGE TO REPAIR ISSUES NOT COVERED UNDER WARRANTY, SUCH AS
- VANDALISM AND ACCIDENTS. • INCLUDES COORDINATION FOR SERVICE VISITS BY A CHARGEPOINT TECHNICAL SUPPORT ENGINEER.
- VISIT <a href="https://www.chargepoint.com/download-file/chargepoint-assure-brochure-us">https://www.chargepoint.com/download-file/chargepoint-assure-brochure-us</a> FOR MORE INFORMATION \*REPLACE "n" WITH DESIRED YEARS OF SERVICE (1, 2, 3, 4, OR 5 YEARS)

# STANDARD WARRANTY

WARRANTIES

2 YEARS, PARTS ONLY; STATION MUST BE INSTALLED BY A CHARGEPOINT CERTIFIED TECHNICIAN.



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CONCEPT DRAWING NOT FOR CONSTRUCTION

**DRAWING TITLE: CHARGEPOINT CP6000** 

TYPICAL 80A WORKPLACE **DESIGN - SINGLE LINE DIAGRAM** 

N.T.S.

**DOCUMENT #**: 32106004e DATE: 08.04.25 CMT

SHEET:

SCALE:

REQUIRED

RECOMMENDED