electrical

STEP-BY-STEP SPECIFICATION – 8-WIRE ELECTRICAL SYSTEM

Step 1 **Determine the location of the source power entering the Panel Run.**

1. At the base of the Panel.
   (a) Use CE8FR1 Reversible Floor Power Entry (default to CE8FR1).
   (b) Select the Panel to which the Floor Power Entry will be attached.
   (c) Select the side of the Panel and the receptacle outlet to which the Floor Power Entry is to be attached.

   Note: When using Pass Through Connectors in conditions other than a straight line, you must use a CE8CI-1 I-Connector along with a CE8CP17 Flexible Mesh Jumper Cable through the corner post.

Step 2 **Determine which Panels are to be powered.**

1. Use CE8PD Power Distribution Housing that corresponds with the width of the Panel.

Step 3 **Connect power to the powered Panels.**

1. Use CE8CP17 Flexible Mesh Jumper Cable between two adjacent powered Panels.
2. Use CE8CP17 Flexible Mesh Jumper Cable between two adjacent powered Panels separated by a post.
3. Use CE8CP17 Flexible Mesh cable (to turn the post) and a CE8CI-1 "I" Connector to attach the CE8CP Pass Through Cable.
   (a) The length of the Pass-Through Cable is calculated by adding together the widths of the non-powered Panels that separate the two powered Panels and applying an additional 16" to the total. (CE8PD Power Distribution Housing is positioned 8" in from the ends of the powered Panel.)
   (b) An additional 3" must be added to the Pass-Through Cable for each post that the cable passes through.
   (c) Subtract 17" from the total length to find the pass through cable length required.
4. From the price list, select the CE8CP Pass-Through Cable that matches the calculated length. If the length is between listed sizes, use the next size up.

Step 4 **Determine the location and circuitry of the receptacles.**

1. Each powered Panel has four (4) potential locations for CE8RD Duplex Receptacles – 2 per side. (Exception: 24" wide Panel has only two potential locations – 1 per side.)
2. At each receptacle location there is a choice of four circuit options. Select a circuit option for each location. Circuits one & two are utility circuits; circuits A & B are dedicated circuits.

COMPILE'S 8-WIRE ELECTRICAL SYSTEM

Electrical
This modification allows for the integration of the commonly required "2+2" configuration (2 utility circuits, 2 dedicated circuits) found in the source power of most of today's North American buildings.

This system is rated for connection to:

1. A grounded 120/240V, single phase, 20 A, 60Hz
2. A 120/208V, 3 phase, 20 A, 60Hz branch circuit

Data/Comm

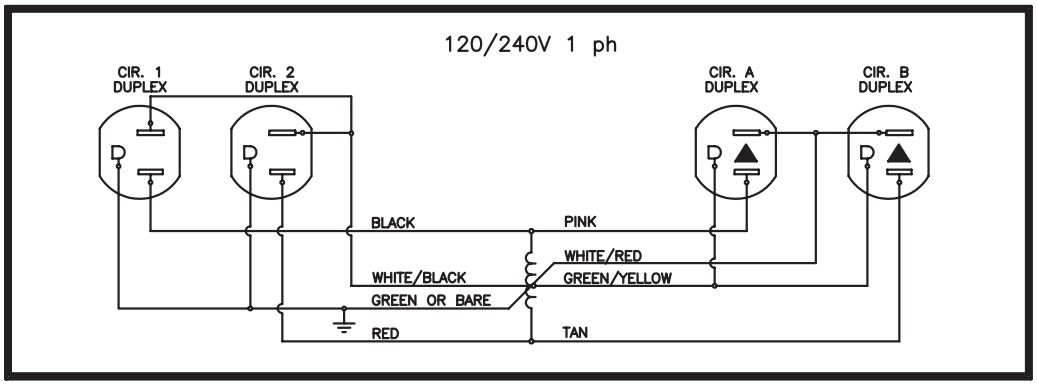
Compile's duplex receptacle openings (1.345 x 2.80) will conform to the ANSI/TIA/EIA Furniture Opening Standard of 1.38 +/- .035 x 2.71 +/- .04

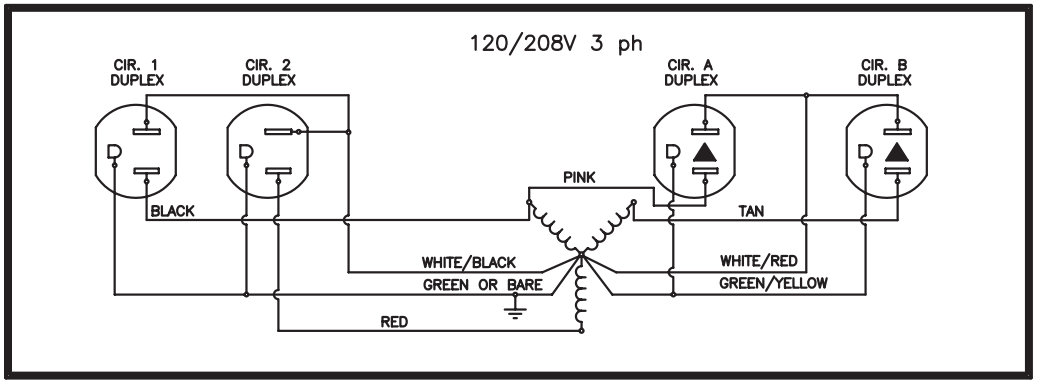
EQUIPMENT AMPERAGE

Calculator	0.25
Electric Eraser	0.50
Pencil Sharpener	1.00
Radio	0.05
Paper Shredder	4.40 - 13.00
Electric Typewriter	1.20
Personal Computer	2.00 - 4.00
Video Display Terminal	0.08
Draft / Letter Quality Printer	1.20 - 3.00
Laser Printer	5.00 - 8.00
Processor / Disk Unit	1.00 - 10.00
Desk Top Plotter	1.50
Fan	1.00
Heater	8.50 - 12.50
Coffee Pot	15.00
Task Light	1.00
Slide Projector	2.00 - 6.00

Since some equipment, such as large copiers, printers, plotters, heaters and coffee makers would occupy most of the circuit capacity, it is recommended that such devices be supplied with the power directly from the wall or building receptacle.

Wiring Schematic





Defining "2 + 2" Wiring Configurations

2 + 2 Configuration (8 wire, 4 circuit)
Two Utility Circuits [Compile's new #1 & #2 circuits] share one neutral wire and one ground wire.
(2 hot [circuit] wires + 1 neutral wire*** + 1 green ground wire* = 4 wires)

Two Dedicated Circuits [Compile's new "A" & "B" circuits] share one neutral wire and one ground wire.
(2 hot [circuit] wires + 1 neutral wire *** + 1 green/yellow ground wire** = 4 wires)

Note:
It is the ground wire that makes the difference between "Utility" and "Dedicated" circuits. Refer to Wiring Schematics found above.

* A Green ground wire is a "system" ground. This means it could be grounded to any piece of metal, including the Panel.
** A Green/Yellow ground wire is isolated, within the wiring conduit, all the way back to the box at the source (building ground).
*** All Neutral Wires are 10 gauge rather than 12 gauge meaning they are larger than normal, allowing greater protection against "noise" or interference on the circuit.

This page provides an exploded view of a sample configuration highlighting each **Electrical** component required when specifying this configuration.

Components

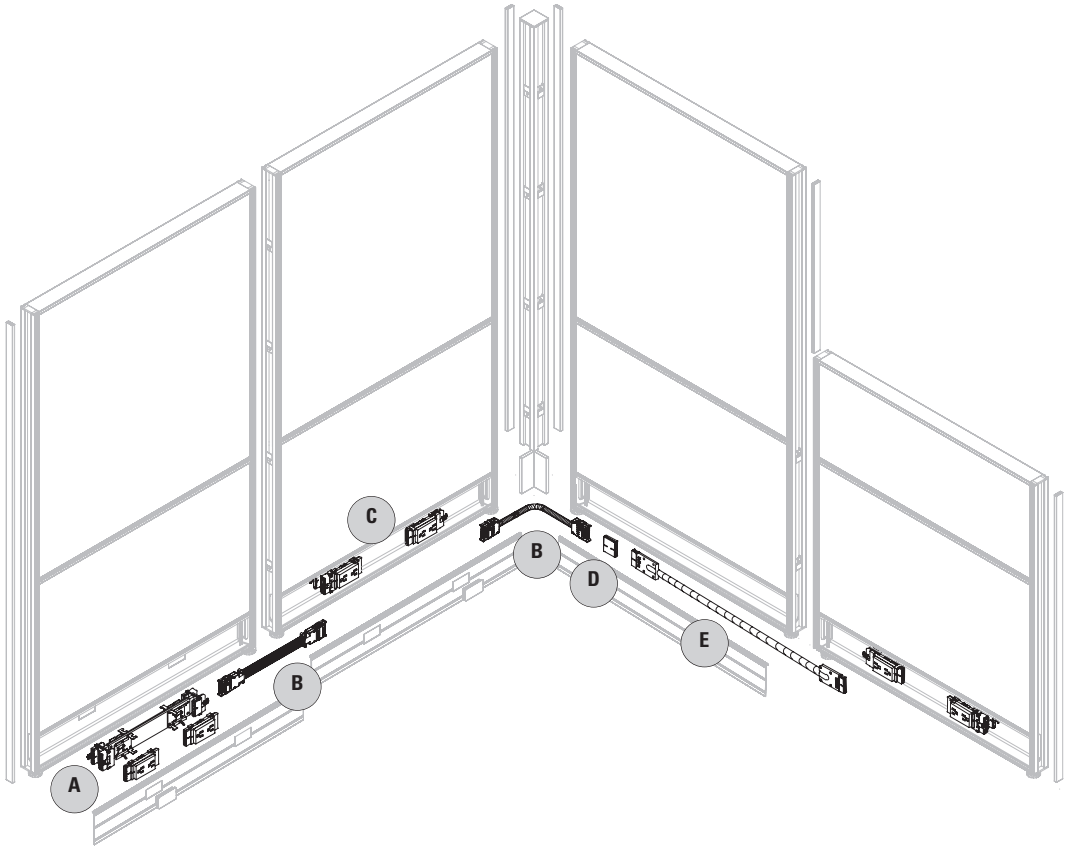
A. CE8PD36 Power Distribution Housing
Note: 8 wire, 4 circuits, 2+2 configuration

B. CE8CP17 Flexible Mesh Jumper Cable (connects two panels side by side or separated by a post)

C. CE8RD Duplex Receptacle

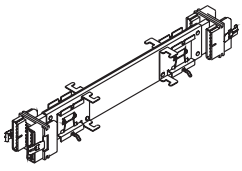
D. CE8CI-1 "I" Connector

E. CE8CP Pass-Through Cable
Note: Must run in a straight line application only
Note: Pass-Through Extension Cable (CE8CPF154) available – extends power capability beyond 208".



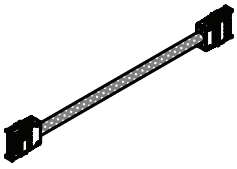
E8PD - POWER DISTRIBUTION HOUSING

- Power housing is specified per panel size (e.g. CE8PD36 is for use in a 36" panel).
- 8 wire, 4 circuits (4th circuit dedicated).
- Power distribution housing is required for each powered panel, the power distribution housing should equal the width of the panel that it is specified in.
- Provides two duplex receptacle ports per panel side on all panel widths except the 24" wide panel.
- 24" wide panel allows for only one (1) duplex receptacle on one panel side.
- Each power distribution housing supports 15-20 amps.
- Must specify Raceway Cover with Knockouts on panels, where Power Distribution Housings will be utilized.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Power Distribution Housing	CE8PD24	111		6 1/4	
		CE8PD30	150		11 1/2	
		CE8PD36	158		17 1/2	
		CE8PD42	161		23 1/2	
		CE8PD48	173		29 1/2	
		CE8PD54	174		39 1/4	
		CE8PD60	175		41 1/2	

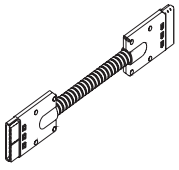
CE8CP17 - FLEXIBLE MESH JUMPER CABLE

- 17" mesh jumper.
- Jumper cable is used to pass through a post or connect two panels together.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Flexible Mesh Jumper Cable	CE8CP17	85		17	

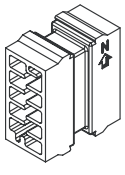
CE8CP - PASS THROUGH CABLE

- Flexible metal conduit is used to distribute electrical power through non-powered panels.
- Metal conduit pass through cables should be in used in a straight runs. Metal conduit pass through cables cannot pass through a post.
- Flexible conduit is required to turn a post. This only comes as 17"w. If panels at the posts do not all have power distribution housings, they must be added even if duplexes are not specified.
- To calculate the length of a Pass-Through Cable, add the widths of the non-powered panels separating the powered panels (panels with distribution housing attached). To this add 16" (distance from the edge of the panel to the distribution housing x 2).
- Add additional 3" when passing through a corner post. See the Tips at the beginning of the section for more details.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Pass Through Cable	CE8CP28	113		28 1/2	
		CE8CP40	120		40 1/2	
		CE8CP46	123		46 1/2	
		CE8CP52	127		52 1/2	
		CE8CP58	134		58 1/2	
		CE8CP64	141		64 1/2	
		CE8CP70	145		70 1/2	
		CE8CP76	147		76 1/2	
		CE8CP82	153		82 1/2	
		CE8CP88	158		88 1/2	
		CE8CP94	162		94 1/2	
		CE8CP100	167		100 1/2	
		CE8CP106	175		106 1/2	
		CE8CP118	184		118 1/2	
		CE8CP130	202		130 1/2	
		CE8CP142	211		142 1/2	
		CE8CP154	222		154 1/2	
		CE8CP172	237		172 1/2	
		CE8CP190	250		190 1/2	
		CE8CP208	258		208 1/2	
	Pass Through Extension Cable	CE8CPF154	222		154 1/2	

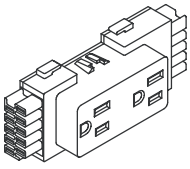
CE8CI-1 - "I" CONNECTOR

- Female - Female connector connects two Pass-Through Cables.
- Connects 17" Flexible Jumper Cable or ceiling feeds to pass through cables.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	"I" Connector	CE8CI-1	63			

CE8RD - DUPLEX RECEPTACLE

- Up to 3 receptacles per circuit
- Up to 6 receptacles per circuit (24 per infeed), not to exceed total of 15 Amps per circuit.
- Duplex Receptacles standard in Black (BLK).
- CE8RD1 = Circuit #1 (utility circuit)
- CE8RD2 = Circuit #2 (utility circuit)
- CE8RDA = Circuit A (dedicated)
- CE8RDB = Circuit B (dedicated)
- CE8RD1 and CE8RD2 (#1 and #2 share common ground)
- CE8RDA and CE8RDB (A and B share common ground)

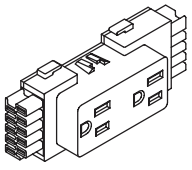
	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Duplex Receptacle	CE8RD1	23			
		CE8RD2	23			
		CE8RDA	23			
		CE8RDB	23			

CE8RDXCA - CALIFORNIA CONTROLLED DUPLEX RECEPTACLE

- California Title 24 meets federal and LEED certification guidelines
- Allows circuit to be controlled or switched off when utility is not in use.
- Duplex receptacles are rated for 15 Amps.
- CE8RD1CA = Circuit #1 (utility circuit)
- CE8RD2CA = Circuit #2 (utility circuit)
- CE8RDACA = Circuit A (dedicated)
- CE8RDBCA = Circuit B (dedicated)

NOTE:

- CE8RD1CA and CE8RD2CA (#1 and #2 share common ground)
- CE8RDACA and CE8RDBCA (A and B share common ground)
- Up to 6 receptacles per circuit (24 per infeed), not to exceed total of 15 Amps per circuit.
- Available in BLK finish only.

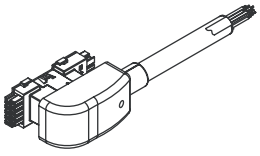
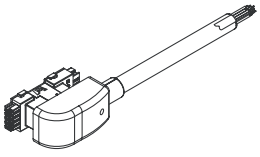
	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Duplex Receptacle	CE8RD1CA	26	2	4 5⁄8	1 1⁄4
		CE8RD2CA	26	2	4 5⁄8	1 1⁄4
		CE8RDACA	26	2	4 5⁄8	1 1⁄4
		CE8RDBCA	26	2	4 5⁄8	1 1⁄4

CE8FR1 - REVERSIBLE FLOOR POWER ENTRY

- Takes the place of a duplex receptable by snapping into the base power way.
- Includes 72" long flexible metal conduit.
- Must be hard wired to source power by a licensed electrician.
- Diameter is 0.85"

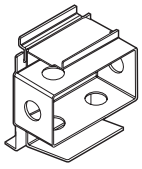
CE8FR2 - REVERSIBLE FLOOR POWER ENTRY

- Takes the place of a duplex receptable by snapping into the base power way.
- Includes 144" long flexible metal conduit.
- Must be hard wired to source power by a licensed electrician.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Reversible Floor Power Entry	CE8FR1	251		72	
	Reversible Floor Power Entry	CE8FR2	324		144	

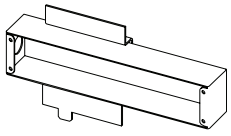
CMEB01 - ELECTRICAL BOX - CHICAGO

- Can be retrofitted in any size of panel at the receptacle location.
- Gives access from one side only at each location.
- Customer to supply conduit, wiring, receptacle, and face plate.
- 2 per panel ,except 24" panel only one
- Note: A licensed electrician must provide hardware connection with the junction box.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Electrical Box - Chicago	CMEB01	71			

CMEB02NY - ELECTRICAL BOX - NEW YORK

- Shipped assembled.
- Comes with pig tail electric.
- Use with 30" wide Panel of larger
- Post extension cable capacities: without electric, 30 with electric, 20
- Includes ceiling bezel and screws.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Electrical Box - New York	CMEB02NY	321			

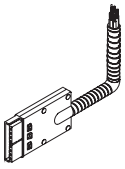
CEPEXX - POST EXTENSION

- Same profile as post.
- Includes two post extension brackets, four screws and four trim inserts.
- Includes ceiling bezel and screws.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Post Extension	CEPE64	138	64		
		CEPE82	173	82		

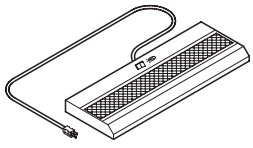
CE8ECX - CEILING FEED

- Snaps into the end of a Power Distribution Housing.
- Flexible metal conduit extends into the ceiling through a corner post and post extension.
- Must be hard wired to source power by a licensed electrician.
- 4" junction box included.
- Post extension ordered separately

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Ceiling Feed	CE8EC1	193	132		
		CE8EC2	339	144		
		CE8EC3	383	180		

CEET - UNDER STORAGE LOW WATTAGE (T5) TASK LIGHTS

- Task light must be at least 6" shorter than storage component to which it is attached.
- T5 rapid start fluorescent lamps
- Uses low wattage for energy efficient illumination
- Meets Chicago and NY electrical codes
- Electronic ballast
- Miniature rocker switch, positive position rocker
- 7 ft. black cord on all under storage models except 48". 48" models come with a 9 ft. cord.
- Available in black only
- Task light bulbs not replaced by manufacturer.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Under Storage Low Wattage (T5) Task Lights	CEET5L18	143		18	
		CEET5L24	150		24	
		CEET5L36	161		36	
		CEET5L48	180		48	

CMECC - CABLE COVER

- Attaches to panels vertically between modules to provide enclosures for power or data cords.
- Available in 21" and 36" lengths, 6 per pack.
- Available in Steel (STL), Black (BLK), Nevada (NEV) only.

	DESCRIPTION	PRODUCT CODE	LIST PRICE	DIMENSIONS/INCHES H	W	D
	Cord Cover	CMECC21	22	21	0.5	1
		CMECC36	34	36	0.5	1