KI Architectural Wall provides the option of using a pre-wired electrical system. The system provides pre-wired electrical devices, face plates, conductors, conduit and plug-and-play connections giving the end user maximum flexibility meeting current and future power distribution needs. The system also includes a variety of jumpers, H-block splitters, and power infeed harness' to maximize the circuitry. The system does not include any data face plates or wiring for voice or data. This guide is intended to assist with the specification of KI Architectural Wall's, pre-wired electrical system.

CHOOSE WIRING SYSTEM
The first step in specifying pre-wired electrical devices in the KI Architectural Wall system is to choose the wiring system. There are two options, 4-2-2 or 3-3-2. Each system allows the end user to accomplish different things electrically.

4-2-2 System
The 4-2-2 system contains 2 options for flexibility 2+2, and 3+1. See the chart below for explanation.

3-3-2 System
The 3-3-2 system consists of three hot wires, three neutral wires, and two ground wires hence the name 3-3-2. The 3-3-2 system gives the user the ability to have two standard circuits and one isolated ground circuit per infeed. The 3-3-2 also gives the user dedicated, non-shared neutrals for every circuit.

Once the wiring system is selected, a decision must be made by the customer regarding which circuit each receptacle must be wired for.

Note: Zone distribution power infeed harness and jumper cables are fully populated with wires. Pre-wired wall panel infeed conduits are not fully populated.
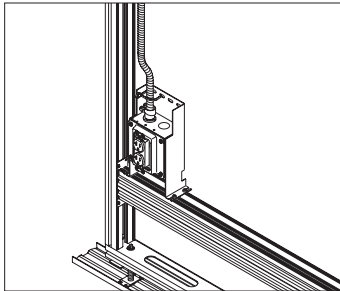
WIRING SYSTEM INFORMATION

4-2-2 = 4 Hot, 2 Neutral, 2 Ground		
4-2-2	2+2	2 Common Ground & 2 Isolated Ground
Circuit:	Wire Designation	
1	L1-N1-G1	Common Ground (or Utility Ground)
2	L2-N1-G1	Common Ground (or Utility Ground)
3T	L3-N2-G2	Isolated Ground
4T	L4-N2-G2	Isolated Ground

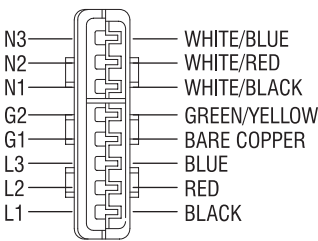| 4-2-2 = 4 Hot, 2 Neutral, 2 Ground		
4-2-2	3+1	3 Common Ground & 1 Isolated Ground
Circuit:	Wire Designation	
1	L1-N1-G1	Common Ground (or Utility Ground)
2	L2-N1-G1	Common Ground (or Utility Ground)
3	L3-N1-G1	Common Ground (or Utility Ground)
4T	L4-N2-G2	Isolated Ground

N2	WHITE/RED
N1	WHITE/BLACK
G2	GREEN/YELLOW
G1	BARE COPPER
L4	PINK
L3	BLUE
L2	RED
L1	BLACK
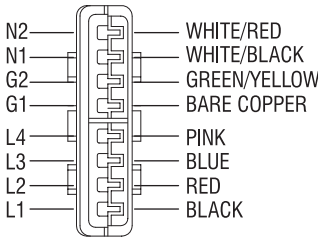
Wiring Order 8-Wire
(4 Hot, 2 Neutral, 2 Ground)

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TECHNICAL SPECIFICATIONS

3-3-2 = 3 Hot, 3 Neutral, 2 Ground		
3-3-2	2+1	2 Common Ground & 1 Isolated Ground
Circuit:	Wire Designation	
1	L1-N1-G1	Common Ground (or Utility Ground)
2	L2-N2-G1	Common Ground (or Utility Ground)
3T	L3-N3-G2	Isolated Ground

|	
N3	WHITE/BLUE
N2	WHITE/RED
N1	WHITE/BLACK
G2	GREEN/YELLOW
G1	BARE COPPER
L3	BLUE
L2	RED
L1	BLACK

**Wiring Order 8-Wire
(3 Hot, 3 Neutral, 2 Ground)**

DETERMINE DEVICE QUANTITY

The KI Architectural Wall pre-wired system provides the user with multiple combinations with one conventional box (4" x 4" two device box with single device cover, or 4" x 4" two device box with two device cover). Boxes are specified by device cover, and then in positions from left to right. For a single device cover there is only one position, two for a two device cover.
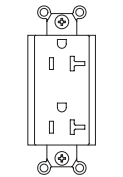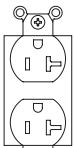

4" x 4" two device box
one device cover
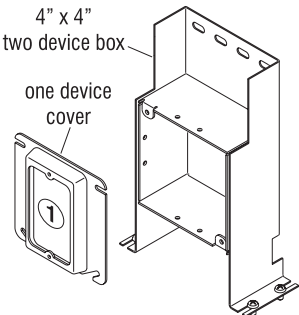
1-Gang (one device cover & box)

4" x 4" two device box
two device cover
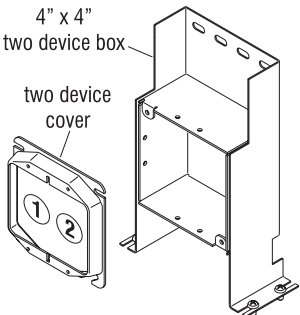
2-Gang (two device cover & box)

RECEPTACLE OPTIONS

Decora Duplex Receptacle

Standard Duplex Receptacle

Color Codes

B = Black	A = Light Almond
U = Blue	R = Red
Q = Brown	W = White
G = Gray	O = Orange
T = Green	X = Office White
I = Ivory	

	Code	Receptacle Type	Hubbell #	B	U	Q	G	T	I	A	R	W	O	X
C	Standard Duplex Receptacle, 15/20 Amp	BR20...	X	X	X	X	X	X	X	X	X		
D	Decora Duplex Receptacle, 15/20 Amp	DR20...	X		X	X	X	X	X	X	X		
E	Standard Duplex Receptacle, Isolated Ground	IG20CR...				X		X	X		X	X	
F	Decora Duplex Receptacle, Isolated Ground	IG20DR...				X		X	X		X	X	
J	Standard Duplex Receptacle, Tamper Resistant	BR20..TR	X	X	X	X	X	X	X	X	X		
K	Decora Duplex Receptacle, Tamper Resistant	DR20..TR	X		X	X	X	X	X		X		
L	Standard Duplex Receptacle, Controlled, Both Outlets	BR20C2...	X	X	X	X	X	X	X	X	X		
M	Decora Duplex Receptacle, Controlled, Both Outlets	DR20C2...	X	X	X	X	X	X	X	X	X		
N	Decora Duplex Receptacle, Surge Protection	HBL5360...		X			X				X		X
P	Decora Duplex Receptacle, GFCI	GFRST20...	X		X	X		X	X	X	X		
S	Decora Duplex Receptacle, USB	USB20ACPD...	X		X	X		X	X		X		
Y	Non-Standard Duplex Receptacle	N/A											
Z	Non-Standard Decora Duplex Receptacle	N/A											

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CHOOSE DEVICE CONFIGURATION
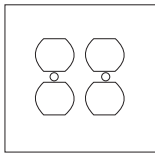4" x 4" two device box with one device or two device cover.

Pre-Wired Receptacle Face Plates

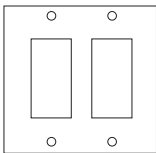**Note:** Switches are not available as a pre-wired option.
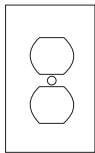
49-1978
One Device
(Standard)
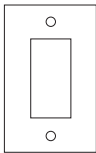
49-1979
One Device
(Decora)

49-1981
Two Device
(Standard)

49-1980
Two Device
(Decora)

Available Colors

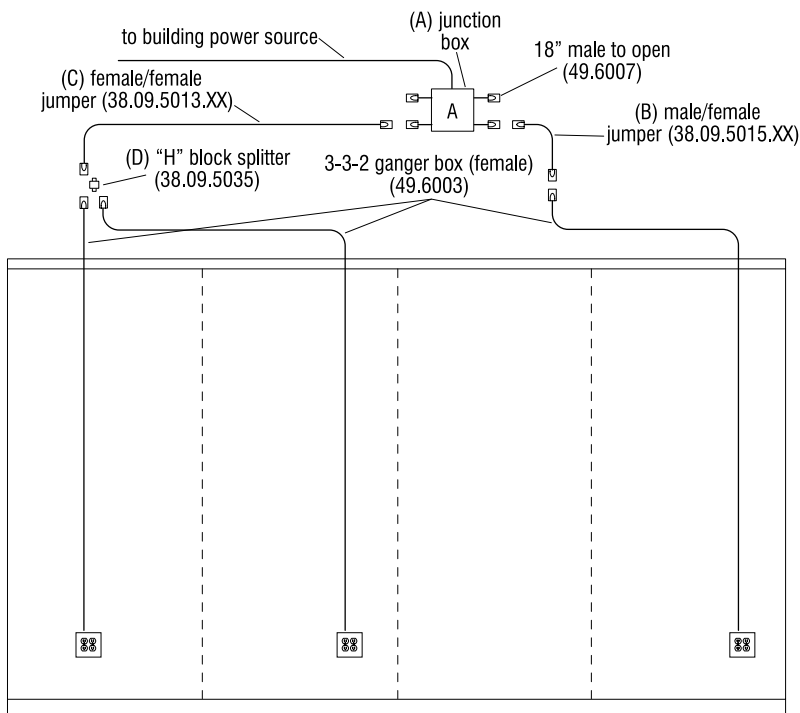| One Device (Standard)	One Device (Decora)	Two Device (Standard)	Two Device (Decora)
49-1978-B Black	49-1979-B Black	49-1981-B Black	49-1980-B Black
49-1978-Q Brown	49-1979-Q Brown	49-1981-Q Brown	49-1980-Q Brown
49-1978-G Gray	49-1979-G Gray	49-1981-G Gray	49-1980-G Gray
49-1978-I Ivory	49-1979-I Ivory	49-1981-I Ivory	49-1980-I Ivory
49-1978-A Light Almond	49-1979-A Light Almond	49-1981-A Light Almond	49-1980-A Light Almond
49-1978-O Orange	49-1979-R Red	49-1981-O Orange	49-1980-R Red
49-1978-R Red	49-1979-W White	49-1981-R Red	49-1980-W White
49-1978-W White	49-1979-U Blue	49-1981-W White	
49-1978-U Blue		49-1981-U Blue	

PRE-WIRE ELECTRICAL DISTRIBUTION SYSTEM COMPONENTS

Power/Data Connectors	Description	Use
	Zone Distribution Power Infeed Harness -18"	Used to bring power to a single panel. Mounts to a standard junction box above the ceiling or below raised floor. Panel infeeds must use modular connector plugs.
	Male/Female Jumper Cable -5' -10' -15' -20'	Used as an "extension cord" to reach between the ganger box infeed and the power infeed plug.
	"H" Block Splitter	Used as a splitter to run two jumper cables from the same infeed plug.
	Female/Female Jumper Cable -5' -10' -15' -20'	Used as an "extension cord" to reach between the "H" Block and the power infeed plug.

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to building power source
(A) junction box
18" male to open (49.6007)
(C) female/female jumper (38.09.5013.XX)
(B) male/female jumper (38.09.5015.XX)
A
(D) "H" block splitter (38.09.5035)
3-3-2 ganger box (female) (49.6003)

3-3-2 Wiring

to building power source
(A) junction box
18" male to open (49.6005)
(C) female/female jumper (38.09.5012.XX)
(B) male/female jumper (38.09.5011.XX)
A
(D) "H" block splitter (49.9904)
4-2-2 ganger box (female) (49.6004)

4-2-2 Wiring

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SINGLE RECEPTACLE STRING CODE

The following codes are used to create pre-wired electrical configurations for the architectural wall. In numerical order, the user will start with the category "Wiring System" and select the code that pertains to the pre-wired electrical configuration desired. Continue the process until step 8 is complete. String examples are available on this page and page 4. String templates are provided on pages 4 and 5 to keep track of the users selected codes.

1. Wiring Configuration
- 4 (4-2-2 Wiring System)
- 3 (3-3-2 Wiring System)

2. Device Quantity
- 1 (single device)
- 2 (two device)

3. Receptacle 1 Type
- See chart on page 2

4. Receptacle 1 Circuit
- C1 (Circuit 1)
- C2 (Circuit 2)
- C3 (Circuit 3)
- C4 (Circuit 4)
- 3T (Circuit 3 Isolated)
- 4T (Circuit 4 Isolated)

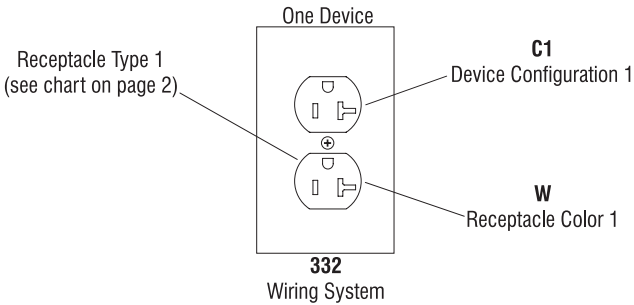## 5. Receptacle 1 Color
- See chart on page 2

6. Receptacle 1 Orientation
- H = Horizontal
- V = Vertical

7. Conduit Length (ft.)
- Custom order by the foot. Minimum length is 4' and maximum is 24'. **Note:** Pre-wired wall panel infeed conduits are not fully populated.

BUILDING EXAMPLE STRING FOR SINGLE RECEPTACLE

String Example 1

1. Wiring Configuration	2. Device Quantity	3. Receptacle 1 Type	4. Receptacle 1 Circuit	5. Receptacle 1 Color	6. Receptacle 1 Orientation	7. Conduit Length
3	1	C	C1	W	V	12

- Conduit Length
- Receptacle Orientation (see chart)
- Receptacle 1 Color (see chart)
- Receptacle 1 Circuit
- Receptacle 1 Type (see chart)
- Number of Receptacles
- Wiring Configuration (332)

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DOUBLE RECEPTACLE STRING CODE

1. Wiring Configuration
- 4 (4-2-2 Wiring System)
- 3 (3-3-2 Wiring System)

2. Device Quantity
- 1 (single device)
- 2 (two device)

3. Receptacle 1 Type
- See chart on page two

4. Receptacle 1 Circuit
- C1 (Circuit 1)
- C2 (Circuit 2)
- C3 (Circuit 3)
- C4 (Circiut 4)
- 3T (Circuit 3 Isolated)
- 4T (Circuit 4 Isolated)

5. Receptacle 1 Color
- See chart on page two

6. Receptacle 2 Type
- See chart on page two

7. Receptacle 2 Circuit
- C1 (Circuit 1)
- C2 (Circuit 2)
- C3 (Circuit 3)
- C4 (Circiut 4)
- 3T (Circuit 3 Isolated)
- 4T (Circuit 4 Isolated)

8. Receptacle 2 Color
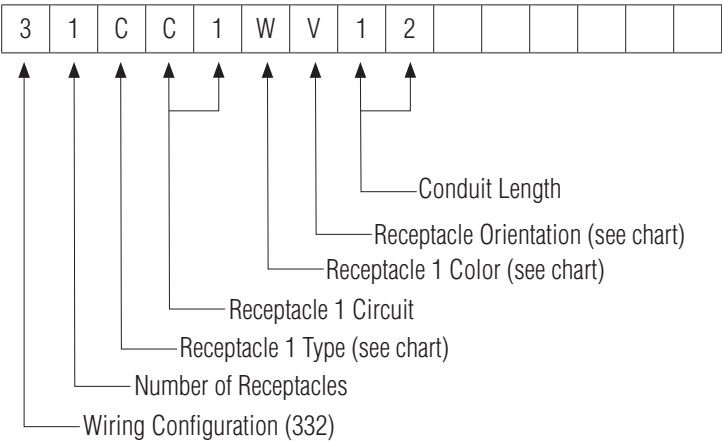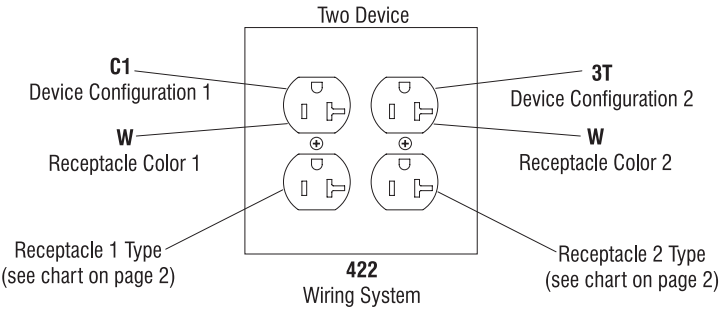- See chart on page two

9. Conduit Length (ft.)
- Custom order by the foot. Minimum length is 4' and maximum is 24'. **Note:** Pre-wired wall panel infeed conduits are not fully populated.
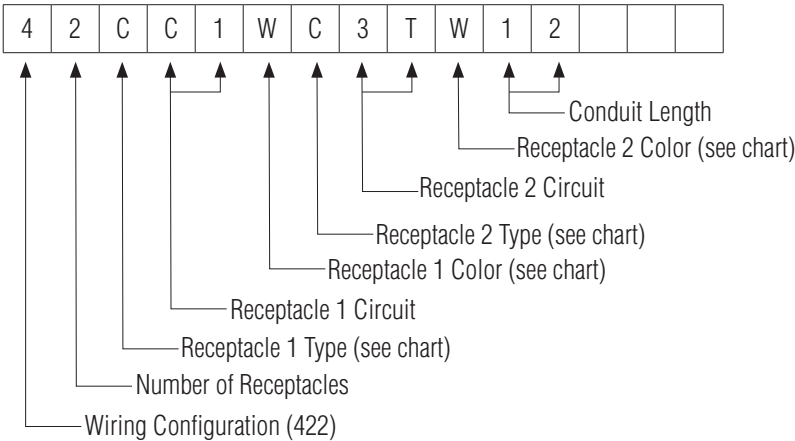
BUILDING EXAMPLE STRING FOR DOUBLE RECEPTACLE

Two Device

C1 — Device Configuration 1
3T — Device Configuration 2
W — Receptacle Color 1
W — Receptacle Color 2
Receptacle 1 Type (see chart on page 2)
Receptacle 2 Type (see chart on page 2)
422 Wiring System

String Example 2

1. Wiring Configuration	2. Device Quantity	3. Receptacle 1 Type	4. Receptacle 1 Circuit	5. Receptacle 1 Color
4	2	C	C1	W

6. Receptacle 2 Type	7. Receptacle 2 Circuit	8. Receptacle 2 Color	9. Conduit Length
C	3T	W	12

4	2	C	C	1	W	C	3	T	W	1	2			

- Conduit Length
- Receptacle 2 Color (see chart)
- Receptacle 2 Circuit
- Receptacle 2 Type (see chart)
- Receptacle 1 Color (see chart)
- Receptacle 1 Circuit
- Receptacle 1 Type (see chart)
- Number of Receptacles
- Wiring Configuration (422)

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STRING TEMPLATE

String 1

1. Wiring Configuration	2. Device Quantity	3. Receptacle 1 Type	4. Receptacle 1 Circuit	5. Receptacle 1 Color	6. Receptacle Orientation (single gang only)

7. Receptacle 2 Type	8. Receptacle 2 Circuit	9. Receptacle 2 Color	10. Conduit Length

String 2

1. Wiring Configuration	2. Device Quantity	3. Receptacle 1 Type	4. Receptacle 1 Circuit	5. Receptacle 1 Color	6. Receptacle Orientation (single gang only)

7. Receptacle 2 Type	8. Receptacle 2 Circuit	9. Receptacle 2 Color	10. Conduit Length

String 3

1. Wiring Configuration	2. Device Quantity	3. Receptacle 1 Type	4. Receptacle 1 Circuit	5. Receptacle 1 Color	6. Receptacle Orientation (single gang only)

7. Receptacle 2 Type	8. Receptacle 2 Circuit	9. Receptacle 2 Color	10. Conduit Length

String 4

1. Wiring Configuration	2. Device Quantity	3. Receptacle 1 Type	4. Receptacle 1 Circuit	5. Receptacle 1 Color	6. Receptacle Orientation (single gang only)

7. Receptacle 2 Type	8. Receptacle 2 Circuit	9. Receptacle 2 Color	10. Conduit Length

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