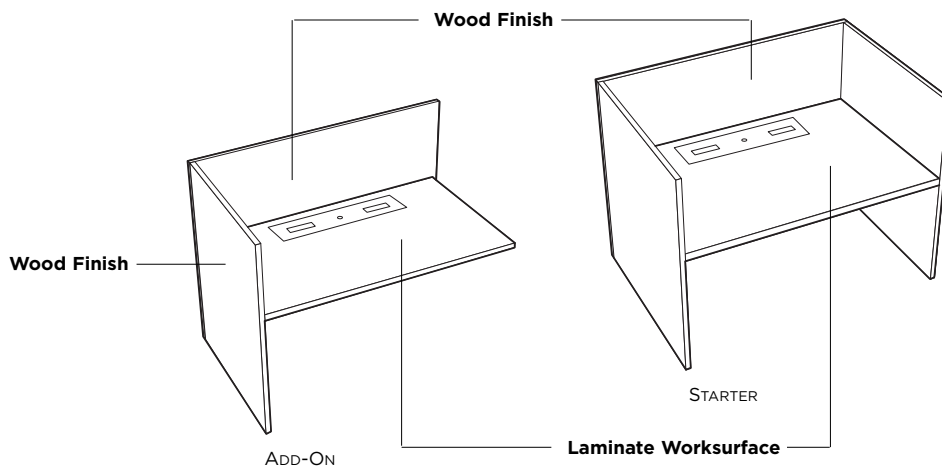


# TECHNOLOGY CARRELS



Technology Carrels combine the Legacy starter/add-on concept to enable space saving configurations with the best solutions for power and data management.

- Carrels are available in two different styles, Computer Workstations and Patron Access Stations, for optimum patron use.
- Top-down access to wires makes management of cords simple.
- Wire management tray features independent raceways for power and data for Category 5 requirements.
- Power access doors are lockable for security and have grommets for easy organization.
- Carrels are available with three fully integrated power options (see pages 116 to 125).
- Single- and double-faced units allow for stand alone or clustering of stations.
- Carrel design is consistent with all other Legacy pieces for an integrated look.
- Carrels are designed to facilitate the technology of today as well as provide flexibility for the future.



## TECHNOLOGY CARRELS

Legacy Technology Carrels provide a variety of solutions for access and organization of power and data. Each carrel is equipped with a power access door (72" and 96" wide carrels have two doors). Each power access door includes two grommet holes and a flush mounted key lock located in the center. Carrels are equipped with a 20-gauge steel cord management tray mounted below the power access door(s). The cord tray has two channels, one for power and one for data, to help eliminate any electromagnetic interference between cables. Also included in the wire management tray are generic face plates that will accommodate most snap in data jacks.

Legacy Technology Carrels are available in Starter and Add-On units to easily construct any length range. The Technology Carrels are offered in single- and double-face construction.

### Upright Panels:

Legacy upright panels are constructed of 1" thick, 45 lb. density industrial grade particle board covered on both sides with wood veneer. Bull-nosed edge treatments are constructed using solid hardwood, FAS select or better. Single-faced panels have a 9/16" radius front top corner and 90 degree back top corner to fit flush against a wall. Double-faced units have a 9/16" radius front and back.

Middle panels have a 3 1/2" x 3 7/8" cutout for cords with an integrated cable separator for data and power.

Each panel has 1" leg leveling glides that screw into pre-threaded metal inserts.

Carrel uprights are available in the following overall heights:

- Juvenile (J) is 33"H
- Youth (Y) is 34"H
- Adult (A) is 37"H
- Wheelchair (W) is 40"H
- Stand-up (P) is 47"H

Overall width for 36"W Carrels including hardware:

- Starter unit measures 37 3/32"W
- Add-on unit measures 36 1/32"W

Overall width for 48"W Carrels including hardware:

- Starter unit measures 49 3/32"W
- Add-on unit measures 48 1/32"W

Overall width for 60"W Carrels including hardware:

- Starter unit measures 61 3/32"W
- Add-on unit measures 60 1/32"W

Overall width for 72"W Carrels including hardware:

- Starter unit measures 73 3/32"W
- Add-on unit measures 72 1/32"W

Overall width for 96"W Carrels including hardware:

- Starter unit measures 97 3/32"W
- Add-on unit measures 96 1/32"W

### Work Surfaces:

Work surface is 1/4" thick, 45 lb. density industrial grade particle board covered with .050" thick high-pressure laminate surface with a solid hardwood edge and .030" backer.

### Work Surface Dimensions:

- 36"W x 30"D Carrel: 27 3/4"D x 35"W
- 36"W x 36"D Carrel: 33 3/4"D x 35"W
- 48"W x 30"D Carrel: 27 3/4"D x 47"W
- 48"W x 36"D Carrel: 33 3/4"D x 47"W
- 60"W x 30"D Carrel: 27 3/4"D x 59"W
- 60"W x 36"D Carrel: 33 3/4"D x 59"W
- 72"W x 30"D Carrel: 27 3/4"D x 71"W
- 72"W x 36"D Carrel: 33 3/4"D x 71"W
- 96"W x 30"D Carrel: 27 3/4"D x 95"W
- 96"W x 36"D Carrel: 33 3/4"D x 95"W

### Worksurface Heights:

Carrels are available in the following worksurface heights:

- Juvenile (J) is 25"H
- Youth (Y) is 26 1/2"H
- Adult (A) is 29"H
- Wheelchair (W) is 32"H
- Stand-up (P) is 39"H

### ADA Compliant Technology Carrels:

Wheelchair or "WS", "WA" models are ADA compliant. Carrel work surface is 32"H with 30.25"H knee clearance. Knee width between end panels varies depending upon carrel size but may be obtained by subtracting 2.125" from the overall width of Starter "WS" units and 1.125" from the overall width of Add-On "WA" units. Exact widths shown above. Knee depth on all 30"D Technology Carrels is 19"D to the cord management tray and 25"D to the cord management tray on 36"D carrels.

### Back Panels:

Back Panels are constructed of 1" thick, 45 lb. density industrial grade particle board with wood veneer on both sides and a solid 3/8" thick, hardwood edge treatment.

### Power Access Doors:

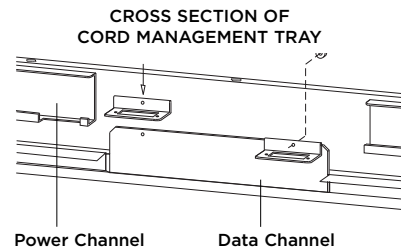
All access doors share construction specifications. Each door is equipped with two grommet holes and a flush mounted key lock, each door is keyed alike. Doors are placed 3 3/8" from the back of the work surface and centered on width. 72" and 96" carrels have two doors spaced off center.

**Door Dimensions:** 5 3/8"D x 23 7/8"W

### Cord Management Tray:

Constructed from 20-gauge steel and finished in powder paint. Each tray is equipped with two end caps and data face plates that mount to a steel partition that separate power and data. The length varies with the overall work surface length.

**Cord Tray Dimensions:** 6"D x 6"W

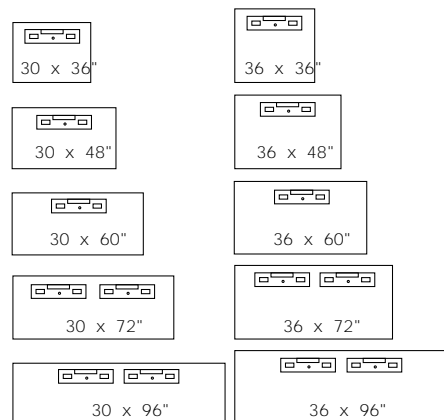


### Linking Technology Carrels:

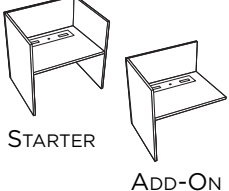
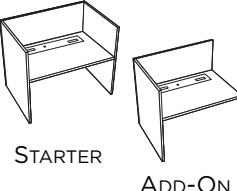
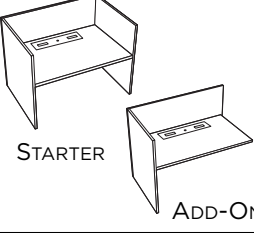
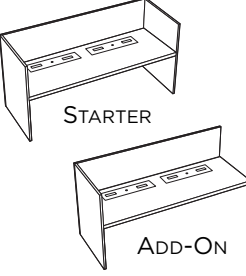
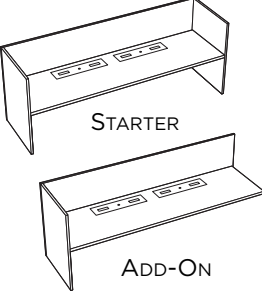
Technology Carrels must be at the same height to link any electrical or data wiring together from carrel to carrel.

**Electrical and Data Options found on page 116-125.**

### Technology Carrel Sizes



# SINGLE-FACED TECHNOLOGY CARRELS

PRODUCT	STARTER MODEL #	ADD-ON MODEL #	DESCRIPTION	WORK SURFACE HEIGHT
<b>36"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3036JS-__	LSTCC3036JA-__	30"D x 36"W x 33"H	25"
	LSTCC3036YS-__	LSTCC3036YA-__	30"D x 36"W x 34"H	26½"
	LSTCC3036AS-__	LSTCC3036AA-__	30"D x 36"W x 37"H	29"
	LSTCC3036WS-__	LSTCC3036WA-__	30"D x 36"W x 40"H	32"
	LSTCC3036PS-__	LSTCC3036PA-__	30"D x 36"W x 47"H	39"
<b>48"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3048JS-__	LSTCC3048JA-__	30"D x 48"W x 33"H	25"
	LSTCC3048YS-__	LSTCC3048YA-__	30"D x 48"W x 34"H	26½"
	LSTCC3048AS-__	LSTCC3048AA-__	30"D x 48"W x 37"H	29"
	LSTCC3048WS-__	LSTCC3048WA-__	30"D x 48"W x 40"H	32"
	LSTCC3048PS-__	LSTCC3048PA-__	30"D x 48"W x 47"H	39"
<b>60"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3060JS-__	LSTCC3060JA-__	30"D x 60"W x 33"H	25"
	LSTCC3060YS-__	LSTCC3060YA-__	30"D x 60"W x 34"H	26½"
	LSTCC3060AS-__	LSTCC3060AA-__	30"D x 60"W x 37"H	29"
	LSTCC3060WS-__	LSTCC3060WA-__	30"D x 60"W x 40"H	32"
	LSTCC3060PS-__	LSTCC3060PA-__	30"D x 60"W x 47"H	39"
<b>72"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3072JS-__	LSTCC3072JA-__	30"D x 72"W x 33"H	25"
	LSTCC3072YS-__	LSTCC3072YA-__	30"D x 72"W x 34"H	26½"
	LSTCC3072AS-__	LSTCC3072AA-__	30"D x 72"W x 37"H	29"
	LSTCC3072WS-__	LSTCC3072WA-__	30"D x 72"W x 40"H	32"
	LSTCC3072PS-__	LSTCC3072PA-__	30"D x 72"W x 47"H	39"
<b>96"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3096JS-__	LSTCC3096JA-__	30"D x 96"W x 33"H	25"
	LSTCC3096YS-__	LSTCC3096YA-__	30"D x 96"W x 34"H	26½"
	LSTCC3096AS-__	LSTCC3096AA-__	30"D x 96"W x 37"H	29"
	LSTCC3096WS-__	LSTCC3096WA-__	30"D x 96"W x 40"H	32"
	LSTCC3096PS-__	LSTCC3096PA-__	30"D x 96"W x 47"H	39"

Bretford's Technology Carrels offer a variety of ways to accommodate computers and peripherals in your library. From youth stations to patron access, select from five work surface heights. Panels extend 8" above the work surface.

**For Electrical and Data Options, see pages 116 to 125**

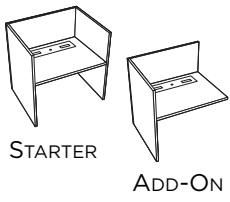
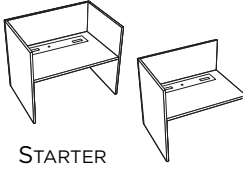
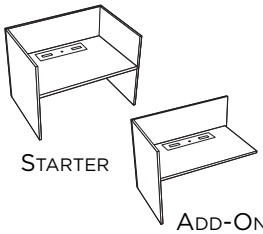
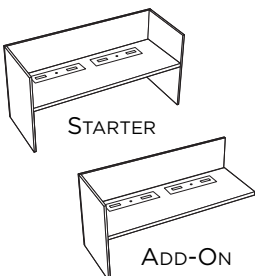
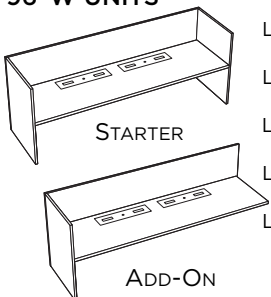
## HOW TO ORDER TECHNOLOGY CARRELS:

Example: 30"D x 96"W x 33"H Technology Carrel - Starter; Raven Paint; Folkstone Grey Laminate; Medium Cherry Veneer

LSTCC3096JS RN 8Q C7

Model Number      Paint Color      Laminate      Veneer

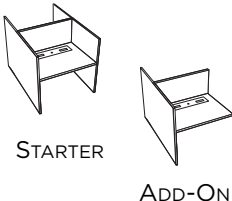
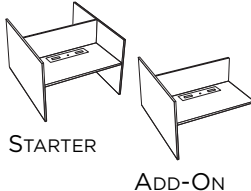
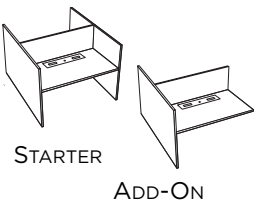
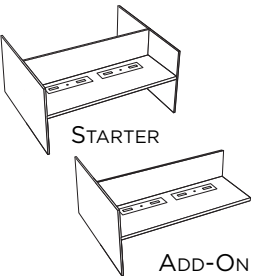
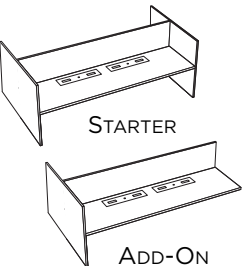
# SINGLE-FACED TECHNOLOGY CARRELS

PRODUCT	STARTER MODEL #	ADD-ON MODEL #	DESCRIPTION	WORK SURFACE HEIGHT
<b>36"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3636JS-__	LSTCC3636JA-__	36"D x 36"W x 33"H	25"
	LSTCC3636YS-__	LSTCC3636YA-__	36"D x 36"W x 34"H	26 1/2"
	LSTCC3636AS-__	LSTCC3636AA-__	36"D x 36"W x 37"H	29"
	LSTCC3636WS-__	LSTCC3636WA-__	36"D x 36"W x 40"H	32"
	LSTCC3636PS-__	LSTCC3636PA-__	36"D x 36"W x 47"H	39"
<b>48"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3648JS-__	LSTCC3648JA-__	36"D x 48"W x 33"H	25"
	LSTCC3648YS-__	LSTCC3648YA-__	36"D x 48"W x 34"H	26 1/2"
	LSTCC3648AS-__	LSTCC3648AA-__	36"D x 48"W x 37"H	29"
	LSTCC3648WS-__	LSTCC3648WA-__	36"D x 48"W x 40"H	32"
	LSTCC3648PS-__	LSTCC3648PA-__	36"D x 48"W x 47"H	39"
<b>60"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3660JS-__	LSTCC3660JA-__	36"D x 60"W x 33"H	25"
	LSTCC3660YS-__	LSTCC3660YA-__	36"D x 60"W x 34"H	26 1/2"
	LSTCC3660AS-__	LSTCC3660AA-__	36"D x 60"W x 37"H	29"
	LSTCC3660WS-__	LSTCC3660WA-__	36"D x 60"W x 40"H	32"
	LSTCC3660PS-__	LSTCC3660PA-__	36"D x 60"W x 47"H	39"
<b>72"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3672JS-__	LSTCC3672JA-__	36"D x 72"W x 33"H	25"
	LSTCC3672YS-__	LSTCC3672YA-__	36"D x 72"W x 34"H	26 1/2"
	LSTCC3672AS-__	LSTCC3672AA-__	36"D x 72"W x 37"H	29"
	LSTCC3672WS-__	LSTCC3672WA-__	36"D x 72"W x 40"H	32"
	LSTCC3672PS-__	LSTCC3672PA-__	36"D x 72"W x 47"H	39"
<b>96"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LSTCC3696JS-__	LSTCC3696JA-__	36"D x 96"W x 33"H	25"
	LSTCC3696YS-__	LSTCC3696YA-__	36"D x 96"W x 34"H	26 1/2"
	LSTCC3696AS-__	LSTCC3696AA-__	36"D x 96"W x 37"H	29"
	LSTCC3696WS-__	LSTCC3696WA-__	36"D x 96"W x 40"H	32"
	LSTCC3696PS-__	LSTCC3696PA-__	36"D x 96"W x 47"H	39"

Bretford's Technology Carrels offer a variety of ways to accommodate computers and peripherals in your library. From youth stations to patron access, select from five work surface heights. Panels extend 8" above the work surface.

**For Electrical and Data Options, see pages 116 to 125**

# DOUBLE-FACED TECHNOLOGY CARRELS

PRODUCT	STARTER MODEL #	ADD-ON MODEL #	DESCRIPTION	WORK SURFACE HEIGHT
<b>36"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3036JS-__	LDTCC3036JA-__	60"D x 36"W x 33"H	25"
	LDTCC3036YS-__	LDTCC3036YA-__	60"D x 36"W x 34"H	26½"
	LDTCC3036AS-__	LDTCC3036AA-__	60"D x 36"W x 37"H	29"
	LDTCC3036WS-__	LDTCC3036WA-__	60"D x 36"W x 40"H	32"
	LDTCC3036PS-__	LDTCC3036PA-__	60"D x 36"W x 47"H	39"
<b>48"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3048JS-__	LDTCC3048JA-__	60"D x 48"W x 33"H	25"
	LDTCC3048YS-__	LDTCC3048YA-__	60"D x 48"W x 34"H	26½"
	LDTCC3048AS-__	LDTCC3048AA-__	60"D x 48"W x 37"H	29"
	LDTCC3048WS-__	LDTCC3048WA-__	60"D x 48"W x 40"H	32"
	LDTCC3048PS-__	LDTCC3048PA-__	60"D x 48"W x 47"H	39"
<b>60"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3060JS-__	LDTCC3060JA-__	60"D x 60"W x 33"H	25"
	LDTCC3060YS-__	LDTCC3060YA-__	60"D x 60"W x 34"H	26½"
	LDTCC3060AS-__	LDTCC3060AA-__	60"D x 60"W x 37"H	29"
	LDTCC3060WS-__	LDTCC3060WA-__	60"D x 60"W x 40"H	32"
	LDTCC3060PS-__	LDTCC3060PA-__	60"D x 60"W x 47"H	39"
<b>72"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3072JS-__	LDTCC3072JA-__	60"D x 72"W x 33"H	25"
	LDTCC3072YS-__	LDTCC3072YA-__	60"D x 72"W x 34"H	26½"
	LDTCC3072AS-__	LDTCC3072AA-__	60"D x 72"W x 37"H	29"
	LDTCC3072WS-__	LDTCC3072WA-__	60"D x 72"W x 40"H	32"
	LDTCC3072PS-__	LDTCC3072PA-__	60"D x 72"W x 47"H	39"
<b>96"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3096JS-__	LDTCC3096JA-__	60"D x 96"W x 33"H	25"
	LDTCC3096YS-__	LDTCC3096YA-__	60"D x 96"W x 34"H	26½"
	LDTCC3096AS-__	LDTCC3096AA-__	60"D x 96"W x 37"H	29"
	LDTCC3096WS-__	LDTCC3096WA-__	60"D x 96"W x 40"H	32"
	LDTCC3096PS-__	LDTCC3096PA-__	60"D x 96"W x 47"H	39"

Bretford's Technology Carrels offer a variety of ways to accommodate computers and peripherals in your library. From youth stations to patron access, select from five work surface heights. Panels extend 8" above the work surface.

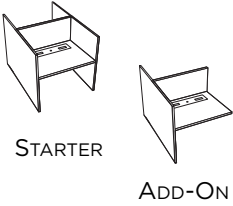
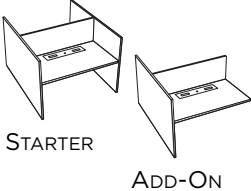
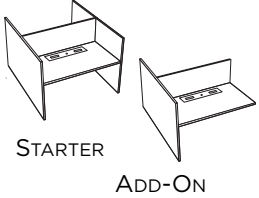
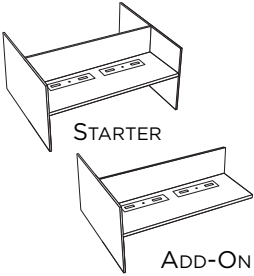
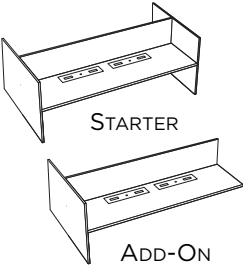
**For Electrical and Data Options, see pages 116 to 125**

**HOW TO ORDER TECHNOLOGY CARRELS:**

Example: 60"D x 72"W x 40"H Technology Carrel - Add-on; Raven Paint; Folkstone Grey Laminate; Medium Cherry Veneer



# DOUBLE-FACED TECHNOLOGY CARRELS

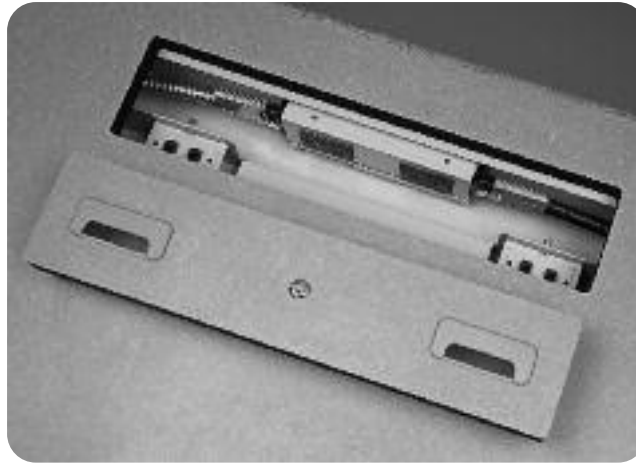
PRODUCT	STARTER MODEL #	ADD-ON MODEL #	DESCRIPTION	WORK SURFACE HEIGHT
<b>36"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3636JS-__	LDTCC3636JA-__	72"D x 36"W x 33"H	25"
	LDTCC3636YS-__	LDTCC3636YA-__	72"D x 36"W x 34"H	26½"
	LDTCC3636AS-__	LDTCC3636AA-__	72"D x 36"W x 37"H	29"
	LDTCC3636WS-__	LDTCC3636WA-__	72"D x 36"W x 40"H	32"
	LDTCC3636PS-__	LDTCC3636PA-__	72"D x 36"W x 47"H	39"
<b>48"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3648JS-__	LDTCC3648JA-__	72"D x 48"W x 33"H	25"
	LDTCC3648YS-__	LDTCC3648YA-__	72"D x 48"W x 34"H	26½"
	LDTCC3648AS-__	LDTCC3648AA-__	72"D x 48"W x 37"H	29"
	LDTCC3648WS-__	LDTCC3648WA-__	72"D x 48"W x 40"H	32"
	LDTCC3648PS-__	LDTCC3648PA-__	72"D x 48"W x 47"H	39"
<b>60"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3660JS-__	LDTCC3660JA-__	72"D x 60"W x 33"H	25"
	LDTCC3660YS-__	LDTCC3660YA-__	72"D x 60"W x 34"H	26½"
	LDTCC3660AS-__	LDTCC3660AA-__	72"D x 60"W x 37"H	29"
	LDTCC3660WS-__	LDTCC3660WA-__	72"D x 60"W x 40"H	32"
	LDTCC3660PS-__	LDTCC3660PA-__	72"D x 60"W x 47"H	39"
<b>72"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3672JS-__	LDTCC3672JA-__	72"D x 72"W x 33"H	25"
	LDTCC3672YS-__	LDTCC3672YA-__	72"D x 72"W x 34"H	26½"
	LDTCC3672AS-__	LDTCC3672AA-__	72"D x 72"W x 37"H	29"
	LDTCC3672WS-__	LDTCC3672WA-__	72"D x 72"W x 40"H	32"
	LDTCC3672PS-__	LDTCC3672PA-__	72"D x 72"W x 47"H	39"
<b>96"W UNITS</b>				
 <p>STARTER</p> <p>ADD-ON</p>	LDTCC3696JS-__	LDTCC3696JA-__	72"D x 96"W x 33"H	25"
	LDTCC3696YS-__	LDTCC3696YA-__	72"D x 96"W x 34"H	26½"
	LDTCC3696AS-__	LDTCC3696AA-__	72"D x 96"W x 37"H	29"
	LDTCC3696WS-__	LDTCC3696WA-__	72"D x 96"W x 40"H	32"
	LDTCC3696PS-__	LDTCC3696PA-__	72"D x 96"W x 47"H	39"

Bretford's Technology Carrels offer a variety of ways to accommodate computers and peripherals in your library. From youth stations to patron access, select from five work surface heights. Panels extend 8" above the work surface.

**For Electrical and Data Options, see pages 116 to 125**

# TECHNOLOGY CARREL: POWER OPTIONS

---



The Legacy Technology Carrels offer three integrated electrical solutions. This variety allows you to select the power option that best suits your application.

- Juice Power Solution - A softwired power system that allows up to four 4-outlet power strips to be daisy chained off a single 15-amp outlet. Easy disconnect of cables allows easy reconfiguration and cleaning.
- Softwire Solution - Six-outlet surge protected power strip with a 20' cord.
- Hardwire System - 8-wire, 4-circuit hardwire system with quick disconnect components for easy installation and reconfiguring which allows carrel-to-carrel linking of electrical system.

## JUICE POWER SYSTEM SOFTWARE SOLUTION

### Juice Power System:

Juice is a software power solution that uses jumper cables to daisy chain power from one table or carrel to the next and does not require tools or an electrician to install. All components are keyed alike, allowing them to connect in any order and maintain flexibility for reconfiguration. Juice works off a standard 15-amp outlet and can support up to four 4-outlet power strips off a single circuit. The Juice Power System consists of a below the work surface 4-outlet power strip, power in-feed cable with sensor, and jumper cables. Juice is a UL Recognized system intended for mounting power strips to specific Bretford tables and carrels and is not intended for other uses.

### Power Strip:

Each power strip has a steel case, 4-outlets and mount to pre-drilled holes using thumb screws.

### Power In-Feed:

Each row of up to four power strips, 16-outlets, is powered from a 12-amp Power In-Feed cable. The cable includes a sensor that monitors power requirements and shuts down when an overload is detected. The sensor features a green LED that turns to solid red if more than four Power Strips are attached, or blinking red if more than one Power In-Feed is attached to a row. They system will reset once the extra Power Strips or Power In-Feeds are removed.

### Jumper Cables:

Jumper cables connect power from one Power Strip to the next and can connect up to four carrels up to 60"W and with one power door, or two 72" or 96" carrels with two power doors.

## SOFTWARE SOLUTION

### Surge Protected Power Strip:

Six-outlet surge protected power strip has one circuit capability and is equipped with a 20' electrical cord. Unit has an on/off switch for single-switch control. UL Listed. For safe operation, power strip can wire individual carrels but cannot be linked carrel-to-carrel.

## HARDWARE SYSTEM

Bretford's 8-wire, 4-circuit hardware system must be installed by a licensed electrician. All components are UL Listed and manufactured in accordance with National Electric Code requirements.

**Please note:** Technology Carrels must be the same height to link together with this system. Hardware system components include the following:

### Power Harness Pack:

Attaches to the inside of the wire management bin and distributes electrical power to the receptacles.

### Duplex Receptacles:

Bretford's 8-wire, 4-circuit system uses Duplex receptacles (each duplex has two electrical outlets) to determine from which circuit the electrical equipment will draw power. The receptacles are marked 1, 2, 3 or 4 to designate the circuit that is activated when it is installed into the Power Harness. Each circuit has 20 amp capability. Circuits 1, 2 and 3 all share a common ground while circuit 4 has a separate ground and a neutral wire. This makes Circuit 4 perfect for more sensitive equipment like printers and network servers. Typically, personal computers and displays are connected to circuits 1, 2 or 3. Specify two duplex receptacles for every one Power Harness.

### Power Feed:

12'L cable with leg chase housing provides a safe and attractive way to bring power from the floor to the wire management bin. Includes a 12'L 8-wire, 4-circuit cable and one leg chase. Power feed must be installed by a licensed electrician, and must be specified according to height of table. Finished in powder paint.

### Power Jumper:

Connects Power Harnesses from table to table. Available in a variety of sizes to best match the table sizes being placed next to each other in order to connect the power harnesses in each carrel.

## CARREL ACCESSORIES

### Leg Chase:

Unit attaches to the inside panel of the Technology Carrel. Two sections inside the leg chase keep power and data cables separated to deter any electromagnetic interference. Leg Chase must be specified according to height of table. Finished in durable powder paint.

### CPU Holder for attachment to side panel:

Unit attaches to either the left or right side on the outside of the carrel panel. Adjustable to accommodate up to 10"W CPUs. Finished in durable powder paint.

**Dimensions:** 5"-10"W x 17"D x 10"H

### CPU Holder for attachment to underside of worksurface:

Unit attaches to the underside of the carrel work surface. Accommodates various CPU sizes. Finished in durable powder paint.

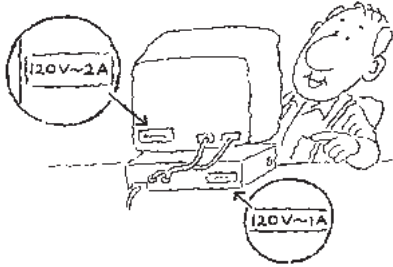
**Dimensions:** 6 $\frac{1}{2}$ "-11 $\frac{1}{2}$ "W x 20 $\frac{3}{8}$ "H

# ORDERING HARDWIRE POWER OPTIONS

Most people are intimidated or nervous when dealing with electrical issues. This step-by-step guide is for people who may not be familiar with electrical systems, but are responsible for specifying such systems when ordering furniture. It provides a basic understanding of an 8-wire, 4-circuit (20 amp per circuit) system and how to specify it. By following the simple steps outlined here, one can easily determine how many circuits are required to ensure safety when using electrical equipment.

The Bretford Technology Carrels featured in this guide have [separate raceways for voice and data wires](#) and meet [Category 5 Performance Requirements](#). Data receptacles on Bretford tables utilize the Amp, Inc. 110 Connect Series jacks.

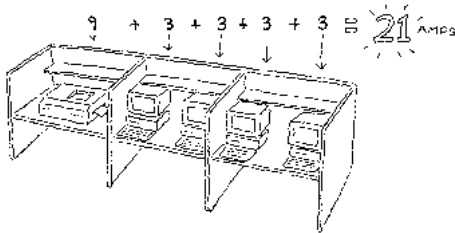
*Electrical components are UL-Listed and manufactured in accordance with National Electric Code requirements. Certain cities and municipalities may have additional requirements.*



## STEP 1

### Figure out how many amps you will be running.

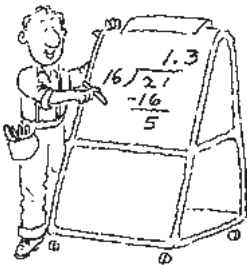
An amp is a unit of measure that tells how much electricity a machine is drawing from an electrical system. On your computer or electrical device, locate the faceplate that describes the machine's technical features. The amps are usually displayed like this: INPUT: 120 V - 1.8 A. If you cannot find this information on the machine, it may be located in the owner's manual.



## STEP 2

### Calculate the total number of amps per powered series.

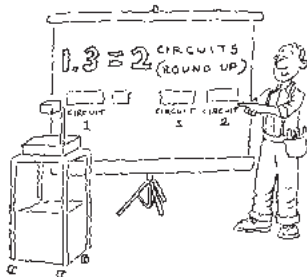
A powered series is the total number of amps from which you are drawing power off of one power feed. In our case, it could be a row of carrels joined together with many power receptacles. Add up the number of amps (determined in STEP 1) for each machine being powered off the series. In our example, we've used an estimate of 3 amps for each computer and monitor. Please note that all equipment is different and will vary by machine.



## STEP 3

### Divide by 16.

Although each circuit is rated for 20 amps of intermittent use, most computers and machinery in an office environment are used continually for many hours. In this type of situation, the National Electric Code restricts the circuits to 16 amps of continuous use. So, divide the sum of the amps (determined in STEP 2) by 16.



## STEP 4

### This is the number of circuits your power series requires.

In most cases, this number is a decimal. Round up to the next whole number, which is the number of circuits required to run your equipment safely. If the number you arrived at is greater than 4 (the most amount of circuits the system will handle), you will have to decrease some of the power being used on this system or create another system with a new power feed.

## STEP 5

### Repeat Steps 1-4 for each remaining powered series.

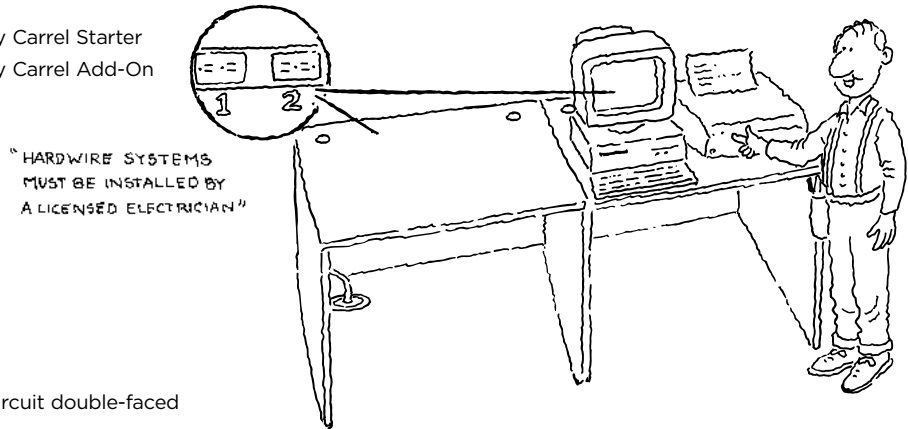
This would apply if you have multiple rows of Technology Carrels and/or Tables. Remember, you must go through this process for each system that runs off its own power feed.

Now that we know how many circuits each powered series will need, let's see how it applies to different types of Bretford Technology Carrels.

Bretford's 8-wire, 4-circuit system uses Duplex receptacles (each duplex has two power outlets) to determine from which circuit the electrical equipment will draw power. The receptacles are marked 1, 2, 3, or 4 to designate the circuit that is activated when it is installed into the PowerHarness. Circuits 1, 2, and 3 all share a common ground while circuit 4 has a separate ground of its own and a neutral wire. This makes Circuit 4 perfect for more sensitive equipment like printers and powerful computers.

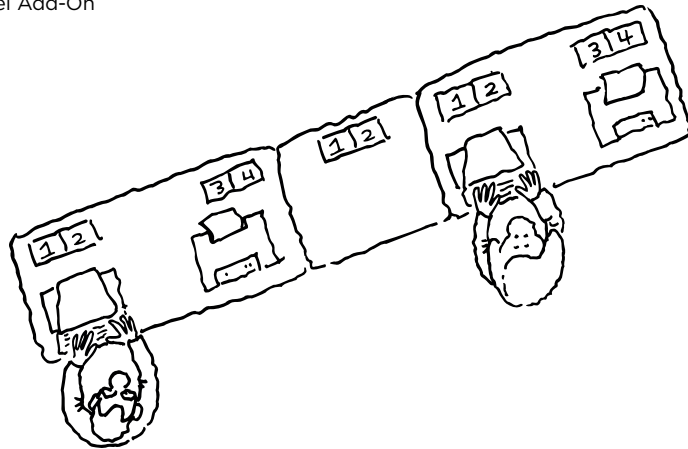
If your system requires 2 circuits, specify Duplexes 1 and 2 along the entire system to access those specific circuits. Here is an example of what a 2-circuit single-faced carrel system will require:

- (1) 36"W Single-Faced Technology Carrel Starter
- (1) 36"W Single-Faced Technology Carrel Add-On
- (2) 36"W PowerHarness Pack
- (2) Duplex Circuit 1
- (2) Duplex Circuit 2
- (1) Hardwire Power Feed



Here is an example of what a 4-circuit double-faced carrel system will require:

- (1) 36"W Double-Faced Technology Carrel Starter
- (3) 36"W Double-Faced Technology Carrel Add-On
- (8) 36"W PowerHarness Pack
- (4) Duplex Circuit 1
- (4) Duplex Circuit 2
- (4) Duplex Circuit 3
- (4) Duplex Circuit 4
- (6) Jumpers
- (2) Hardwire Power Feeds



**Reminder:**

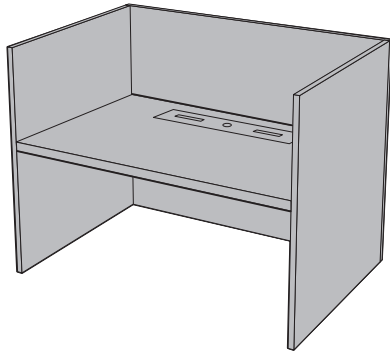
All powered carrels come standard equipped with data and communication support raceways. Bretford does not offer data jacks. Therefore, they must be purchased separately.

*Meets Category 5 Requirements.*

# ORDERING POWER OPTIONS: HARDWARE

Electrical Applications: Model Numbers for all of these products are on the following two pages. For heavy power usage, which require multiple circuits, specify the hardwire power system.

**NOTE:** Must be installed by a licensed electrician.



Example of Legacy Carrel Order Code:  
**LSTCC 30 36 A S K2**  
 Model Number      Depth      Width      Starter or Add-on      Wood Finish

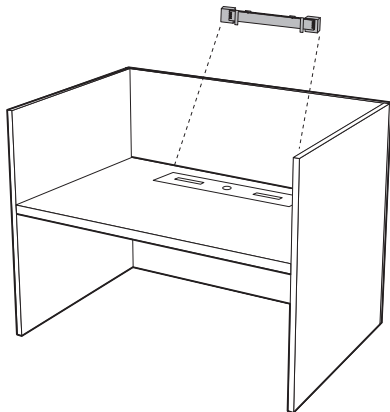
HEIGHTS:  
 J = Juvenile - 25"H  
 Y = Youth - 26 1/2"H  
 A = Adult - 29"H  
 W = Wheelchair - 32"H  
 P = Standup - 39"H

## STEP 1 Specify Technology Carrel (pages 112-115)

(designated by grey shaded area on picture)

- Choose the size, height and finish for the Technology Carrel.
- Each Technology Carrel has a wire management tray mounted directly beneath the lockable power door(s).
- Be sure to specify either starter or add-on for every carrel.

**Please note: Carrels must be same height to be linked.**

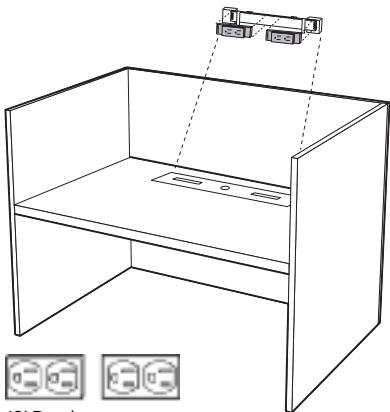


PowerHarness Order Code:  
**LSTCC3036AS K2**  
**LHRNPK 364860**  
 PowerHarness      Width

## STEP 2 Specify PowerHarness Pack (page 124)

(designated by grey shaded area on picture)

- PowerHarness pack should be specified according to width of Technology Carrel ordered.
- Specify Model LHRNPK364860 for 36", 48" and 60"W carrels.
- Specify Model LHRNPK7296 for 72"W or 96"W carrels.
- One PowerHarness pack is required per Technology Carrel.
- Includes one harness per power door, and a jumper for carrels with two power doors.



Duplex Order Code:  
**LSTCC3036AS K2**  
**LHRNPK364860**  
**(2) DUPLC \_ \_**  
 Model Number

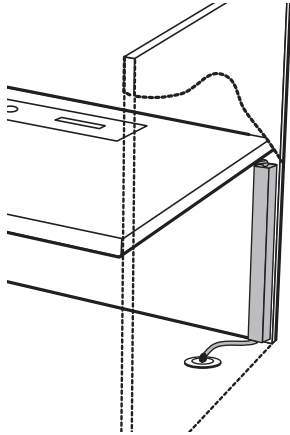


(2)Duplexes

## STEP 3 Specify Receptacle (page 124)

(designated by grey shaded area on picture)

- Choose two receptacles per PowerHarness.
- See pages 134-135 for information on ordering circuits.



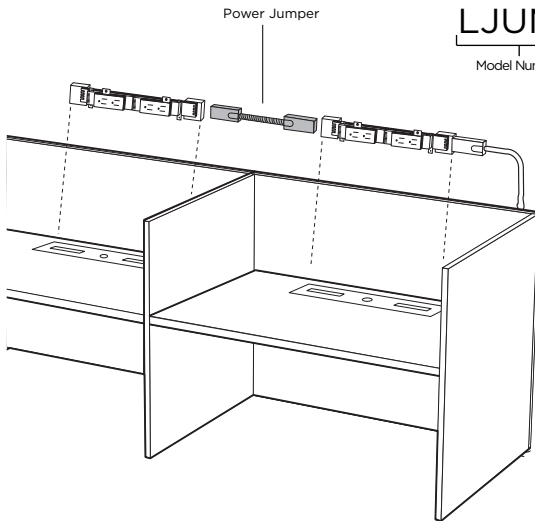
Power Feed Order Code:  
 LSTCC3036AS K2  
 LHRNPK364860  
 (2) DUPLC\_ \_  
 LHDWR A - \_  
Model Number      Height      Finish

#### STEP 4 Specify the Power Feed (page 124)

(designated by grey shaded area on picture)

- Specify the power feed based upon the height of the carrel.
- One power feed is required per run of carrels, two power feeds per run of double-faced carrels.
- Power feed includes a leg chase that separates power and data wiring.

**Please note: Each power feed must be installed by a licensed electrician.**



Power Jumper Order Code:  
 LSTCC3036AS K2  
 LHRNPK364860  
 (2) DUPLC\_ \_  
 LHDWRA- \_  
 LJUMP 36 36  
Model Number      Width of carrel      Width of carrel

#### Step 5 Specify Power Jumpers to connect Carrels (page 124)

(designated by grey shaded area on picture)

- Specify one power jumper between each set of connecting carrels.
- The unit connects power between all Technology Carrels.
- See page 138 for information on ordering Power Jumpers.



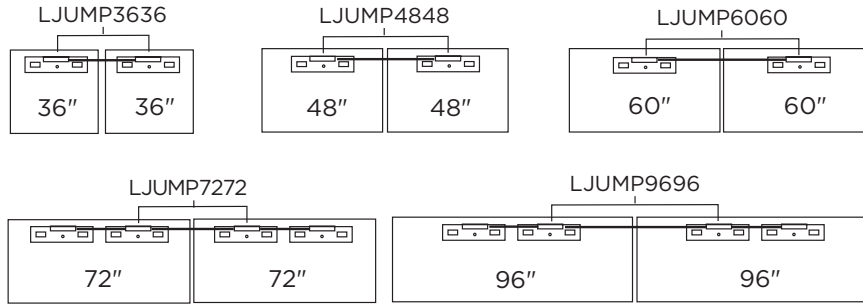
**TIP:** To link carrels with hardwire components, all work surfaces must be the same height.

# ORDERING POWER OPTIONS: HARDWARE

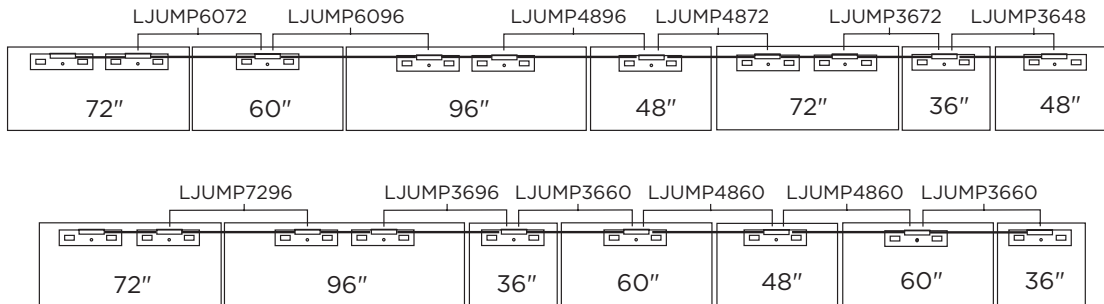


**TIP:** Use the diagrams below to determine which jumper size is needed.

**Example:** To connect two 48"W Technology Carrels, model LJUMP4848 should be specified. To connect a 36"W and a 72"W Technology Carrel, model LJUMP3672 should be specified.



## Examples:



# ORDERING POWER OPTIONS: JUICE POWER



**TIP:** Use the chart below to determine which jumper size is needed.

**LIBRARY TECHNOLOGY CARREL JUMPER SIZE CHART**

Table	36"W	48"W	60"W	72"W	96"W
<b>36"W</b>	DPJ38	DPJ42	DPJ54	DPJ32 & DPJ42	DPJ32 & DPJ54
<b>48"W</b>	DPJ42	DPJ54	DPJ54	DPJ32 & DPJ54	DPJ32 & DPJ62
<b>60"W</b>	DPJ54	DPJ54	DPJ62	DPJ32 & DPJ54	DPJ32 & DPJ62
<b>72"W</b>	DPJ32 & DPJ42	DPJ32 & DPJ54	DPJ32 & DPJ54	DPJ32 (2) & DPJ42	DPJ32 (2) & DPJ54
<b>96"W</b>	DPJ32 & DPJ54	DPJ32 & DPJ62	DPJ32 & DPJ62	DPJ32 (2) & DPJ54	DPJ32 (2) & DPJ74

# ORDERING POWER OPTIONS: JUICE POWER

Electrical Applications: The Juice Power System allows a series of tables or carrels to be connected and powered off a standard 15-amp outlet using a single plug. Juice is UL Recognized as a furniture power component and does not require tools or an electrician to install. Model Numbers for the Juice Power System are found on page 125.

Power Strip Order Code:

LSTCC 30 48 AS K2

(1) DPCF4  
Qty Model Number

LDTCC 36 72 AS K2

(4) DPCF4  
Qty Model Number

## STEP 1

### Specify one Power Strip for each Power Door (page 125)

- 72" and 96" wide carrels each have two Power Doors per side. Double sided carrels have four Power Doors.
- A maximum of four Power Strips can be daisy chained off a single 15-amp outlet/circuit. Only two 72" and/or 96" carrels can be connected on the same circuit.
- Double sided carrels use an independent Juice Power System for each side and component quantity is double the same size carrel in a single sided version.

Power In-Feed Order Code:

LSTCC 30 48 AS K2

(1) DPCF4  
(1) DPP120  
Qty Model Number

LDTCC 36 72 AS K2

(4) DPCF4  
(2) DPP120  
Qty Model Number

## STEP 2

### Specify Power In-Feed (page 125)

- One Power In-Feed for rows of up to four 48" and/or 60" and rows of two 72" and/or 96" wide carrels.
- Double sided carrels use an independent Juice Power System for each side and component quantity is double the same size carrel in a single sided version.

Power Jumper Order Code:

LSTCC 30 48 AS K2

(1) DPCF4  
(1) DPP120  
(1) DPJ62  
Qty Model Number

LDTCC 36 72 AS K2

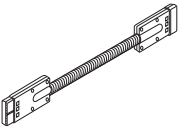
(4) DPCF4  
(2) DPP120  
(2) DPJ42  
(4) DPJ32  
Qty Model Number

## Step 3

### Specify Power Jumpers to connect Tables (page 125)

- Specify one power jumper between each set of connecting carrels.
- Specify one power jumper to connect the two Power Doors on a 72" or 96" wide carrels.
- Double sided carrels use an independent Juice Power System for each side and component quantity is double the same size carrel in a single sided version.

# HARDWIRE COMPONENTS

PRODUCT	MODEL #	DESCRIPTION	CONNECTS THESE CARREL SIZES
	LJUMP3636	25½" long	36"W Carrel with 36"W Carrel
	LJUMP3648	31½" long	36"W Carrel with 48"W Carrel
	LJUMP3660	37½" long	36"W Carrel with 60"W Carrel
	LJUMP3672	28½" long	36"W Carrel with 72"W Carrel
	LJUMP3696	40½" long	36"W Carrel with 96"W Carrel
	LJUMP4848	37½" long	48"W Carrel with 48"W Carrel
	LJUMP4860	43½" long	48"W Carrel with 60"W Carrel
	LJUMP4872	34½" long	48"W Carrel with 72"W Carrel
	LJUMP4896	46½" long	48"W Carrel with 96"W Carrel
	LJUMP6060	49½" long	60"W Carrel with 60"W Carrel
	LJUMP6072	40½" long	60"W Carrel with 72"W Carrel
	LJUMP6096	52½" long	60"W Carrel with 96"W Carrel
	LJUMP7272	31½" long	72"W Carrel with 72"W Carrel
	LJUMP7296	43½" long	72"W Carrel with 96"W Carrel
	LJUMP9696	55½" long	96"W Carrel with 96"W Carrel

Power Jumpers are designed to chain power from one carrel to another when sitting side by side. Since the combination of carrel sizes sitting next to one another can vary, Bretford offers a variety of power jumpers that will allow every possible combination of carrels to be connected to each other.

Carrels are designed to only share power components on one side and not designed to share front to back. Double sided carrels require twice as many power components.

**\* Hardwire option requires installation by a licensed electrician.**

## POWER HARNESS



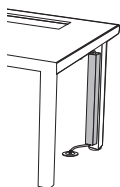
LHRNPK364860	PowerHarness Pack for 36", 48" and 60"W Contains one harness
LHRNPK7296	PowerHarness Pack for 72" and 96"W Contains two harnesses and one jumper

## DUPLEX



DUPLC11	Duplex (circuit 1)
DUPLC22	Duplex (circuit 2)
DUPLC33	Duplex (circuit 3)
DUPLC44	Duplex (circuit 4)

## POWER FEED



LHDWRJ-__	Hardwire Power Feed for 25"H Worksurfaces
LHDWRY-__	Hardwire Power Feed for 26½"H Worksurfaces
LHDWRA-__	Hardwire Power Feed for 29"H Worksurfaces
LHDWRW-__	Hardwire Power Feed for 32"H Worksurfaces
LHDWRP-__	Hardwire Power Feed for 39"H Worksurfaces

# SOFTWARE COMPONENTS & CARREL ACCESSORIES

PRODUCT	MODEL #	DESCRIPTION
<b>JUICE POWER STRIP</b>	DPCF4	4-Outlet Power Strip, Juice Power System
<b>JUICE POWER IN-FEED</b>	DPP120	Power In-Feed Cable with Sensor, Juice Power System
<b>JUICE POWER JUMPERS</b>	DPJ32	32"L Jumper Cable, Juice Power System
	DPJ38	38"L Jumper Cable, Juice Power System
	DPJ42	42"L Jumper Cable, Juice Power System
	DPJ54	54"L Jumper Cable, Juice Power System
	DPJ62	62"L Jumper Cable, Juice Power System
	DPJ74	74"L Jumper Cable, Juice Power System
<b>POWER STRIP</b>	SPPSSI	Surge-Protected Power Strip for 36" and 48"W carrels (includes one unit)
	SPPSDB	Surge-Protected Power Strip for 60", 72" and 96"W carrels (includes two units)
<b>LEG CHASE</b>	LCHASE25-__	Leg Chase for 25"H Worksurfaces
	LCHASE26-__	Leg Chase for 26½"H Worksurfaces
	LCHASE29-__	Leg Chase for 29"H Worksurfaces
	LCHASE32-__	Leg Chase for 32"H Worksurfaces
	LCHASE39-__	Leg Chase for 39"H Worksurfaces
<b>CPU HOLDER</b>	BRE17033-__	Slim CPU Holder. Towers 3 ¾" - 8 ¼" W
	BRE17068-__	Standard CPU Holder (shown). Towers 5 ½" - 10" W
	QWTMTC-__	Slim CPU Holder. Towers 3 ½" - 5 ¾" W - Attaches to underside of work surface
	QWTCPU-__	Standard CPU Holder. Towers 6 ½" - 11 ½" W - Attaches to underside of work surface

