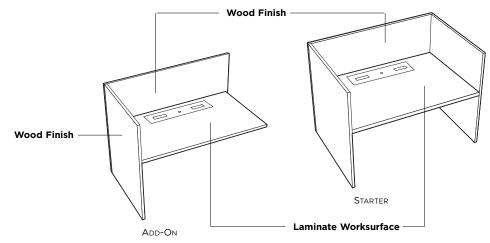
# TECHNOLOGY CARRELS



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  $3\frac{1}{2}$ " x  $3\frac{7}{8}$ " 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<sup>3</sup>/<sub>32</sub>"W Add-on unit measures 48<sup>1</sup>/<sub>32</sub>"W

Overall width for 60"W Carrels including hardware:

Starter unit measures 61<sup>3</sup>/<sub>32</sub>"W Add-on unit measures 60<sup>1</sup>/<sub>32</sub>"W

Overall width for 72"W Carrels including hardware:

Starter unit measures 73<sup>3</sup>/<sub>32</sub>"W Add-on unit measures 72<sup>1</sup>/<sub>32</sub>"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 11/4" 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<sup>3</sup>/<sub>4</sub>"D x 35"W
- 48"W x 30"D Carrel: 273/4"D x 47"W
- 48"W x 36"D Carrel: 33<sup>3</sup>/<sub>4</sub>"D x 47"W
- 60"W x 30"D Carrel: 27<sup>3</sup>/<sub>4</sub>"D x 59"W
- 60"W x 36"D Carrel: 333/4"D x 59"W
- 72"W x 30"D Carrel:  $27^3/_4$ "D x 71"W
- 72"W x 36"D Carrel: 33<sup>3</sup>/<sub>4</sub>"D x 71"W • 96"W x 30"D Carrel: 27<sup>3</sup>/<sub>4</sub>"D x 95"W
- 96"W x 36"D Carrel: 333/4"D x 95"W

### **Worksurface Heights:**

Carrels are available in the following worksurface heights:

- Juvenile (J) is 25"H
- Youth (Y) is 261/2"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 33/8" from the back of the work surface and centered on width. 72" and 96" carrels have two doors spaced off center.

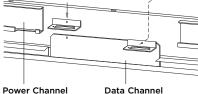
Door Dimensions: 5<sup>3</sup>/<sub>8</sub>"D x 23<sup>7</sup>/<sub>8</sub>"W

### **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:  $6"D \times 6"W$ 

CROSS SECTION OF CORD MANAGEMENT TRAY

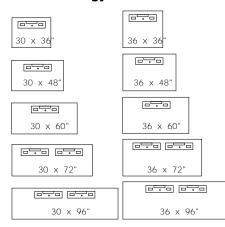


### **Linking Technology Carrels:**

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 Surfa Height	CE
36"W UNITS	LSTCC3036JS	LSTCC3036JA	30"D x 36"W x 33"H	25"	
	LSTCC3036YS	LSTCC3036YA	30"D x 36"W x 34"H	261/2"	Bretford's Technology Carrels
	LSTCC3036AS	LSTCC3036AA	30"D x 36"W x 37"H	29"	offer a variety of ways to accommodate computers and
STARTER	LSTCC3036WS	LSTCC3036WA	30"D x 36"W x 40"H	32"	peripherals in your library. From youth stations to patron access,
Add-On	LSTCC3036PS	LSTCC3036PA	30"D x 36"W x 47"H	39"	select from five work surface heights. Panels extend 8" above the work surface.
48"W UNITS	LSTCC3048JS	LSTCC3048JA	30"D x 48"W x 33"H	25"	For Electrical and Data
	LSTCC3048YS	LSTCC3048YA	30"D x 48"W x 34"H	261/2"	Options, see pages 116 to
	LSTCC3048AS	LSTCC3048AA	30"D x 48"W x 37"H	29"	125
STARTER	LSTCC3048WS	LSTCC3048WA	30"D x 48"W x 40"H	32"	
ADD-ON	LSTCC3048PS	LSTCC3048PA	30"D x 48"W x 47"H	39"	
60"W UNITS	LSTCC3060JS	LSTCC3060JA	30"D x 60"W x 33"H	25"	
	LSTCC3060YS	LSTCC3060YA	30"D x 60"W x 34"H	261/2"	
	LSTCC3060AS	LSTCC3060AA	30"D x 60"W x 37"H	29"	
	LSTCC3060WS	LSTCC3060WA	30"D x 60"W x 40"H	32"	
STARTER ADD-O		LSTCC3060PA	30"D x 60"W x 47"H	39"	
72"W UNITS					
	LSTCC3072JS	LSTCC3072JA	30"D x 72"W x 33"H	25"	
	LSTCC3072YS	LSTCC3072YA	30"D x 72"W x 34"H	261/2"	
STARTER	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"	
ADD-ON					
96"W UNITS					
			30"D x 96"W x 33"H	25"	
10:00	LSTCC3096YS	LSTCC3096YA	30"D x 96"W x 34"H	261/2"	
STARTER			30"D x 96"W x 37"H	29"	
	LSTCC3096WS ≽	LSTCC3096WA	30"D x 96"W x 40"H	32"	
ADD-ON	LSTCC3096PS	LSTCC3096PA	30"D x 96"W x 47"H	39"	
VI					

How to Order Technology Carrels:

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



## SINGLE-FACED TECHNOLOGY CARRELS

D	STARTER	Add-On	6	Work Surfa	CE
Product	Model #	Model #	Description	HEIGHT	
36"W UNITS	LSTCC3636JS	LSTCC3636JA	36"D x 36"W x 33"H	25"	
	LSTCC3636YS	LSTCC3636YA	36"D x 36"W x 34"H	261/2"	Bretford's Technology Carrels offer a variety of ways to
	LSTCC3636AS	LSTCC3636AA	36"D x 36"W x 37"H	29"	accommodate computers and peripherals in your library. From
STARTER	LSTCC3636WS	LSTCC3636WA	36"D x 36"W x 40"H	32"	youth stations to patron access, select from five work surface
ADD-ON	LSTCC3636PS	LSTCC3636PA	36"D x 36"W x 47"H	39"	heights. Panels extend 8" above the work surface.
48"W UNITS	LSTCC3648JS	LSTCC3648JA	36"D x 48"W x 33"H	25"	For Electrical and Data
	LSTCC3648YS	LSTCC3648YA	36"D x 48"W x 34"H	261/2"	Options, see pages 116 to
	LSTCC3648AS	LSTCC3648AA	36"D x 48"W x 37"H	29"	125
STARTER	LSTCC3648WS	LSTCC3648WA	36"D x 48"W x 40"H	32"	
Add-On	LSTCC3648PS	LSTCC3648PA	36"D x 48"W x 47"H	39"	_
60"W UNITS	LSTCC3660JS	LSTCC3660JA	36"D x 60"W x 33"H	25"	
	LSTCC3660YS	LSTCC3660YA	36"D x 60"W x 34"H	261/2"	
	LSTCC3660AS	LSTCC3660AA	36"D x 60"W x 37"H	29"	
STARTER	SLSTCC3660WS	LSTCC3660WA	36"D x 60"W x 40"H	32"	
ADD-C		LSTCC3660PA	36"D x 60"W x 47"H	39"	
72"W UNITS	-				
	LSTCC3672JS	LSTCC3672JA	36"D x 72"W x 33"H	25"	
	LSTCC3672YS	LSTCC3672YA	36"D x 72"W x 34"H	261/2"	
STARTER	LSTCC3672AS	LSTCC3672AA	36"D x 72"W x 37"H	29"	
	LSTCC3672WS	LSTCC3672WA	36"D x 72"W x 40"H	32"	
A O.	LSTCC3672PS	LSTCC3672PA	36"D x 72"W x 47"H	39"	
ADD-ON					
96"W UNITS	1 STCCZ606 IS-	STCC3606   A -	36"D x 96"W x 33"H	25"	
			36"D x 96"W x 34"H	26 <sup>1</sup> / <sub>2</sub> "	
	<del></del>	_	36"D x 96"W x 37"H	29"	
STARTER			36"D x 96"W x 40"H	32"	
(a.3 (a.3)	_		36"D x 96"W x 47"H	39"	
Add-On					

### Double-Faced Technology Carrels

PRODUCT MODEL # MODEL # DESCRIPTION HEIGHT	
<b>36"W UNITS</b> LDTCC3036JS LDTCC3036JA 60"D x 36"W x 33"H 25"	
LDTCC3036YS LDTCC3036YA 60"D x 36"W x 34"H 261/2"	Bretford's Technology Carrels offer a variety of ways to
LDTCC3036AS LDTCC3036AA 60"D x 36"W x 37"H 29"	accommodate computers and peripherals in your library. From
STARTER LDTCC3036WS LDTCC3036WA 60"D x 36"W x 40"H 32"	youth stations to patron access, select from five work surface
ADD-ON LDTCC3036PS LDTCC3036PA 60"D x 36"W x 47"H 39"	heights. Panels extend 8" above the work surface.
48"W UNITS LDTCC3048JS LDTCC3048JA 60"D x 48"W x 33"H 25"	For Electrical and Data
LDTCC3048YS LDTCC3048YA 60"D x 48"W x 34"H 261/2"	Options, see pages 116 to
LDTCC3048AS LDTCC3048AA 60"D x 48"W x 37"H 29"	125
LDTCC3048WS LDTCC3048WA 60"D x 48"W x 40"H 32"	
ADD-ON LDTCC3048PS LDTCC3048PA 60"D x 48"W x 47"H 39"	
60"W UNITS  LDTCC3060JS LDTCC3060JA 60"D x 60"W x 33"H 25"	
LDTCC3060YS LDTCC3060YA 60"D x 60"W x 34"H 261/2"	
LDTCC3060AS LDTCC3060AA 60"D x 60"W x 37"H 29"	
LDTCC3060WS LDTCC3060WA 60"D x 60"W x 40"H 32"	
ADD-ON LDTCC3060PS LDTCC3060PA 60"D x 60"W x 47"H 39"	
72"W UNITS	
LDTCC3072JS LDTCC3072JA 60"D x 72"W x 33"H 25"	
LDTCC3072YS LDTCC3072YA 60"D x 72"W x 34"H 261/2"	
STARTER 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"  ADD-ON	
96"W UNITS	
LDTCC3096JS LDTCC3096JA 60"D x 96"W x 33"H 25"	
LDTCC3096YS LDTCC3096YA 60"D x 96"W x 34"H 261/2"	
STARTER 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"  ADD-ON	

How to Order Technology Carrels:

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



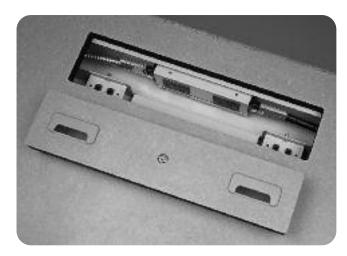


## Double-Faced Technology Carrels

Product		Starter Model #	Add-On Model #	Description	Work Surface Height	CE
36"W UNIT	'S	LDTCC3636JS	LDTCC3636JA	72"D x 36"W x 33"H	25"	
		LDTCC3636YS	LDTCC3636YA	72"D x 36"W x 34"H	26¹/2″	Bretford's Technology Carrels
		LDTCC3636AS	LDTCC3636AA	72"D x 36"W x 37"H	29"	offer a variety of ways to accommodate computers and
N Starter		LDTCC3636WS	LDTCC3636WA	72"D x 36"W x 40"H	32"	peripherals in your library. From youth stations to patron access,
	N Add-On	LDTCC3636PS	LDTCC3636PA	72"D x 36"W x 47"H	39"	select from five work surface heights. Panels extend 8" above the work surface.
48"W UNIT	S	LDTCC3648JS	LDTCC3648JA	72"D x 48"W x 33"H	25"	
		LDTCC3648YS	LDTCC3648YA	72"D x 48"W x 34"H	261/2"	For Electrical and Data Options, see pages 116 to
		LDTCC3648AS	LDTCC3648AA	72"D x 48"W x 37"H	29"	125
STARTER		> LDTCC3648WS	LDTCC3648WA	72"D x 48"W x 40"H	32"	
	√ Add-On	LDTCC3648PS	LDTCC3648PA	72"D x 48"W x 47"H	39"	
60"W UNIT	·s	LDTCC3660JS	LDTCC3660JA	72"D x 60"W x 33"H	25"	
		LDTCC3660YS	LDTCC3660YA	72"D x 60"W x 34"H	261/2"	
		LDTCC3660AS	LDTCC3660AA	72"D x 60"W x 37"H	29"	
		LDTCC3660WS	LDTCC3660WA	72"D x 60"W x 40"H	32"	
Starter Ai	DD-ON	LDTCC3660PS	LDTCC3660PA	72"D x 60"W x 47"H	39"	
72"W UNIT	S					
		LDTCC3672JS	LDTCC3672JA	72"D x 72"W x 33"H	25"	
B:3 (B:3		LDTCC3672YS	LDTCC3672YA	72"D x 72"W x 34"H	261/2"	
START	ER	LDTCC3672AS	LDTCC3672AA	72"D x 72"W x 37"H	29"	
	9 9 9	LDTCC3672WS	LDTCC3672WA	72"D x 72"W x 40"H	32"	
	ADD-ON		LDTCC3672PA	72"D x 72"W x 47"H	39"	
96"W UNIT	'S					
	A	LDTCC3696JS	LDTCC3696JA	72"D x 96"W x 33"H	25"	
(a.a. (a.)		LDTCC3696YS	LDTCC3696YA	72"D x 96"W x 34"H	261/2"	
STAR	N RTER	LDTCC3696AS	LDTCC3696AA	72"D x 96"W x 37"H	29"	
		LDTCC3696WS	LDTCC3696WA	72"D x 96"W x 40"H	32"	
	.DD-ON	LDTCC3696PS	LDTCC3696PA	72"D x 96"W x 47"H	39"	
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# 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 SOFTWIRE SOLUTION

### Juice Power System:

Juice is a softwire 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.

### **SOFTWIRE 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.

#### **HARDWIRE SYSTEM**

Bretford's 8-wire, 4-circuit hardwire 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. Hardwire 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. <u>Leg Chase must be specified according to height of table.</u> 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.

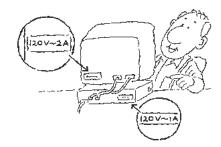
**Dimensions:** 61/2"-111/2"W x 203/8"H

# 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 <u>separate raceways for voice and data wires and meet Category 5</u>
<u>Performance Requirements.</u> Data receptacles on Bretford tables utilize the Amp, Inc. 110 Connect Series jacks.

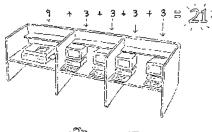
Electrical components are UL-Listed and manufactured in accordance with National Electric Code requirements. Certain cities and municipalities may have additional requirements.



### STEP 1

# Figure out how many amps you will be running.

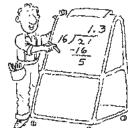
An amp is a unit of measure that tells how much electricity a machine is drawing from an electrical system. On your computer or electrical device, locate the faceplate that describes the machine's technical features. The amps are usually displayed like this: INPUT:  $120\ V - 1.8\ A$ . If you cannot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



### STEP 2

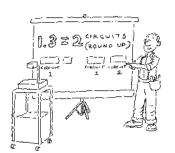
# Calculate the total number of amps per powered series.

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.



# 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.

### STED 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.

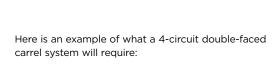
Now that we know how many circuits each powered series will need, let's see how it applies to different types of Bretford Technology Carrels.

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.

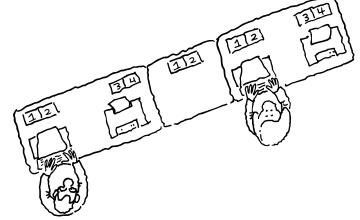
If your system requires 2 circuits, specify Duplexes 1 and 2 along the entire system to access those specific circuits. Here is an example of what a 2-circuit single-faced carrel system will require:

- (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

"HARDWIRE SYSTEMS MUST BE INSTALLED BY A LICENSED ELECTRICIAN"



- (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.

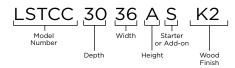
# Ordering Power Options: Hardwire

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:



#### HEIGHTS:

J = Juvenile - 25"H  $Y = Youth - 26^{1}/_{2}"H$ A = Adult - 29"H

W= Wheelchair - 32"H

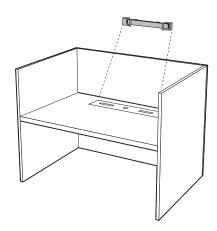
P = Standup - 39"H

### 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.



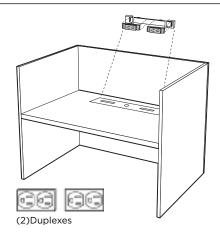
PowerHarness Order Code:

LSTCC3036AS K2 LHRNPK 364860

### 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

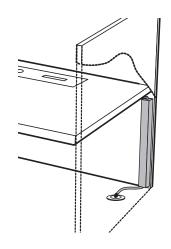


### STEP 3 Specify Receptacle (page 124)

(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\_\_

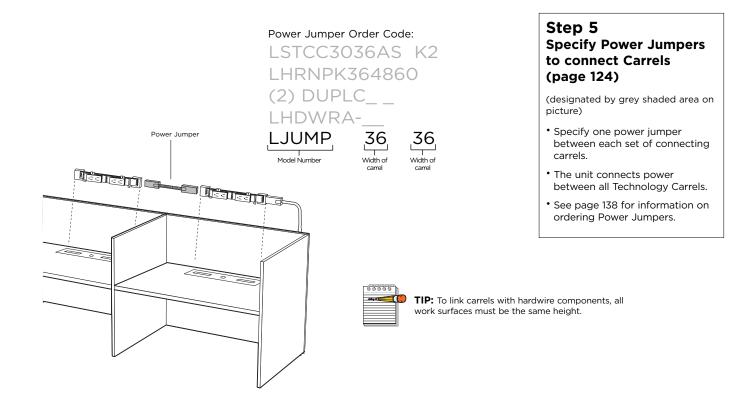
# LHDWR A - Height Finish

# 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.

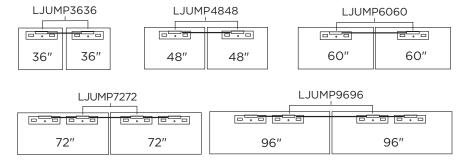


# Ordering Power Options: Hardwire

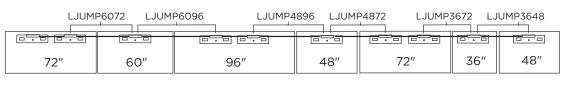


TIP: Use the diagrams below to determine which jumper size is needed.

**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:**



LJUI	MP7296 LJUMP3	LJUMP3696 LJUMP3660 LJUMP48		4860 LJUMP4860 LJUMP36		3660
70"		7.611	60"	40"	60"	36"
72"	96"	36"	60"	48"	60	36

# 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
36"W	DPJ38	DPJ42	DPJ54	DPJ32 & DPJ42	DPJ32 & DPJ54
48"W	DPJ42	DPJ54	DPJ54	DPJ32 & DPJ54	DPJ32 & DPJ62
60"W	DPJ54	DPJ54	DPJ62	DPJ32 & DPJ54	DPJ32 & DPJ62
72"W	DPJ32 & DPJ42	DPJ32 & DPJ54	DPJ32 & DPJ54	DPJ32 (2) & DPJ42	DPJ32 (2) & DPJ54
96"W	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 Recgonized 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



LDTCC 36 72 AS K2



### STEP 1 Specify one Power Strip for each Power Door (page 125)

- 72" and 96" wide carreks 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 | 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

LDTCC 36 72 AS K2

(4) DPCF4

(2) DPP120

(2) DPJ42

(4) DPJ32

Qty Dode 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.

# CONNECTS THESE CARREL

# POWER JUMPERS

**PRODUCT** 

Model #	Description	SIZES
LJUMP3636	25½" long	36"W Carrel with 36"W Carrel
LJUMP3648	31 <sup>1</sup> / <sub>2</sub> " long	36"W Carrel with 48"W Carrel
LJUMP3660	37 <sup>1</sup> / <sub>2</sub> " long	36"W Carrel with 60"W Carrel
LJUMP3672	28 <sup>1</sup> / <sub>2</sub> " 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	43 <sup>1</sup> / <sub>2</sub> " long	48"W Carrel with 60"W Carrel
LJUMP4872	34 <sup>1</sup> / <sub>2</sub> " long	48"W Carrel with 72"W Carrel
LJUMP4896	46½" long	48"W Carrel with 96"W Carrel
LJUMP6060	49 <sup>1</sup> / <sub>2</sub> " long	60"W Carrel with 60"W Carrel
LJUMP6072	40½" long	60"W Carrel with 72"W Carrel
LJUMP6096	52 <sup>1</sup> / <sub>2</sub> " long	60"W Carrel with 96"W Carrel
LJUMP7272	31 <sup>1</sup> / <sub>2</sub> " long	72"W Carrel with 72"W Carrel
LJUMP7296	43½" long	72"W Carrel with 96"W Carrel
LJUMP9696	55 <sup>1</sup> / <sub>2</sub> " 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

### SOFTWIRE COMPONENTS & CARREL ACCESSORIES

Product	Model #	Description
JUICE POWER STRIP	DPCF4	4-Outlet Power Strip, Juice Power System
JUICE POWER IN-FEED	DPP120	Power In-Feed Cable with Sensor, Juice Power System
JUICE POWER JUMPERS	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
POWER STRIP	SPPSSI	Surge-Protected Power Strip for 36" and 48"W carrels (includes one unit)
Constant of the	SPPSDB	Surge-Protected Power Strip for 60", 72" and 96"W carrels (includes two units)
LEG CHASE	LCHASE25	Leg Chase for 25"H Worksurfaces
	LCHASE26	Leg Chase for 261/2"H Worksurfaces
	LCHASE29	Leg Chase for 29"H Worksurfaces
	LCHASE32	Leg Chase for 32"H Worksurfaces
	LCHASE39	Leg Chase for 39"H Worksurfaces
CPU HOLDER	BRE17033	Slim CPU Holder. Towers 3 <sup>3</sup> / <sub>4</sub> " - 8 <sup>1</sup> / <sub>4</sub> " W
	BRE17068	Standard CPU Holder (shown). Towers 5 $^{1}/_{2}$ " - 10" W
	QWTMTC	Slim CPU Holder. Towers 3 $^{1}/_{2}$ " - 5 $^{3}/_{4}$ " W - Attaches to underside of work surface
	QWTCPU	Standard CPU Holder. Towers 6 $^{1}/_{2}$ " - 11 $^{1}/_{2}$ " W - Attaches to underside of work surface