lighting, electrics & communications

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lighting, electrics & communications overview

Expansion Cityline offers a non-directional wiring system that allows for maximum flexibility and simple reconfiguration. Moreover, it offers varieties of data/power access such as direct access under or above worksurface and hidden access under worksurface.



Desk Structure or EZ Fence Structure use the same electrical components. Only the Power Harness (JNEPH) lenght specification needs to be adapted accordingly



1 Power is provided to workstations by a Base Feed (Shown) or Ceiling Feed. Power Feed can be hidden by a Power Pole

2 Power Boxes must be mounted on beam cut-out location and Receptacle Outlets must be mounted on Power Box (JNEPB)

3 Cable Tray for Access Door can be used underneath worksurfaces to manage extra wires routed through the Access Door

- 4 Cable Tray can be used undeneath worksurfaces to manage Plug-In Power Bar and extra wires routed through grommets
- 3 Power Qube can be mounted on worksurface with square cut-out or underneath worksurface to provide electric/data/USB above or below the worksurface
- 6 Linear LED Light can be mounted on Mounted Storage to provides local task light or ambiance lighting

lighting basics

Expansion Cityline LED strip lighting solution provides energy efficient lighting when mounted-storage is used on the worksurface.

- Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use
- Some jurisdiction require Resettable Breakers. Check local codes
- All dimensions are nominal



Light Finish: Clear Anodized (AC) only

lighting dimension vs storage



beam-mounted power & communications basics

The following outlines the features of Expansion Cityline Power and Communications products.

Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use



understanding data/communications

Expansion Cityline uses Desk Structure or EZ Fence Structure to run electric and data/communication cables through the workstations. Structural Beam is the main component that allows wire management and installation of power and data access for users.

Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use

structural beam or ez fence beam data/communication cable capacity

40% empty space should be considered to ensure future workstations expansion and routing wires in tight corners



facing sides mounting style (B)

facing down mounting style (D)



understanding data/communications (continued)

structural beam or ez fence beam data/communication cut-out

Structural Beam and Power Module - Facing Down Mounting Bracket data/communication cut-out allows the installation of Voice/Data faceplates (not included) and jacks (not included), Communication Extender Plates (JNEDE) or Data Covers and Voice/Data Adapters of USB/Data Faceplate Kit (JNECFK)



USB/Data Faceplate Kit (JNECFK)

- Features Data Cover and Voice/Data Adapters
- Can accommodate up to two voice/data ports
- Can be installed on following products:
 - Structural Beam (JNDBB) or EZ Fence Beam (JZSBB or JZSBS)
 - Facing Down Communication Box (JNEDCB)
 - Communication Extender Plate (JNEDE)
 - Communication Box (JNECB)
- Power Qube (JNEPC)
- Faceplate Finish: Platinum Grey Coordinate (YN)*
- * Matches with standard grey simplex

facing sides mounting style (B)



Top View

facing down mounting style (D)

chicago beam-mounted power & communications basics

The following outlines the features of Expansion Cityline Power and Communications for Chicago products.

Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use



2 Chicago Power Box – Facing Down (JNECPBD) provides access to power under the Chicago Structural Beam or Chicago EZ Fence Beam. Mounts inside the beam at cut-out location and comes with two receptacle outlets offer in Standard 15 amp (S), T-Slot 20 amp (T), Controlled 15 amp (D) or Controlled 20 amp (E).

Communication Extender Plate (JNEDE) is mounted on beam data cut-out. Mandatory only when used with Structural Beam Cover – Side (JNDBCS), Chicago EZ Fence Beam or with CAT6 jacks in facing down application. Allows the mounting of modular furniture adapter (**not** included) with modular jacks (**not** included) or Communication Blank Plate (JNECBP) if data is **not** required

Communication Blank Plate (JNECBP) is used when no data access is required. Can be mounted directly on Chicago Structural Beam (JNDCB), on Chicago EZ Fence Beam (JZSCB or JZSCS) or on Communication Extender Plate (JNEDE)

3 Facing Down Brackets are included with Chicago Structural Beam (JNDCB) or Chicago EZ Fence Beam (JZSCB or JZSCS) and retain wires inside structural beam

Facing Down Communication Box (JNECDB) is mounted under the beam and provides data access. Communication Extender Plate is included to protect modular jack (not included) connections

Chicago Junction Box (JNECJB):

- -Mounted inside the Chicago beam at cut-out location
- -Can be used as a Chicago Junction Box to split the power to up to 3 outs
- Can be used to connect up to two Chicago Power Module Storage for Height-Adjustability (JNECPH) and allows to continue the power distribution through workstations
- -Module does not include any connector
- -Electrical connections must be done on-site by a certified electrician
- -Each end as a 1/2" trade size knockout and two additional on one face
- * Receptacle outlets are duplexes offered in Standard 15 amp (S), T-Slot 20 amp (T), Controlled 15 amp (D) or Controlled 20 amp (E).

understanding chicago data/communications

Expansion Cityline uses Desk Structure or EZ Fence Structure to run Chicago electric and data/communication cables through the workstations. Chicago Structural Beam is the main component that allows wire management and installation of power and data access for users.

Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use

chicago structural beam or chicago ez fence beam data/communication cable capacity

40% empty space should be considered to ensure future workstations expansion and routing wires in tight corners

facing sides mounting style (B)



facing down mounting style (D)



understanding chicago data/communications (continued)

chicago structural beam or chicago ez fence beam data/communication cut-out

Chicago Structural Beam data/communication cut-out allows the installation of Voice/Data faceplates (not included) and jacks (not included), Communication Extender Plates (JNEDE) or Data Covers and Voice/Data Adapters of USB/Data Faceplate Kit (JNECFK)



USB/Data Faceplate Kit (JNECFK)

- Features Data Cover and Voice/Data Adapters
- Can accommodate up to two voice/data ports
- Can be installed on following products:
- Chicago Structural Beam (JNDCB) or Chicago EZ Fence Beam (JZSBS or JZSCS)
- Facing Down Communication Box (JNEDCB)
- Communication Extender Plate (JNEDE)
- Communication Box (JNECB)
- Power Qube (JNEPC)

Faceplate Finish: Platinum Grey Coordinate (YN)* * Matches with standard grey simplex

facing sides mounting style (B)



Top View

facing down mounting style (D)

• The Chicago Power Box – Facing Down **does not** allow the installation of any data/communication plate



- In Chicago applications, only the Facing Down Communication Box (JNECDB) can be specified to allow access to data/communications under the beam
- Not compatible with Suspended Credenza, Semi-Suspended Credenza, Bag Drop, Side Tray Beam-Mounted Accessories and EZ Suspended Credenzas



application guide

understanding data/communications (continued)

structural or chicago structural beam - facing sides (B)

Fully concealed and exposed structural beam applications allow many possibilities to provide Communication/Data/Voice/USB access to users; see examples below

without structural beam cover





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understanding data/communications (continued)

structural beam or ez fence beam - facing down (D)



chicago structural beam or ez fence beam - facing down (D)



Market Standard Voice/ Data faceplates and jacks (Not included)

short or long modular jacks

Voice/Data Faceplates and Communication Extender Plate (JNEDE) **cannot** be mounted on Chicago facing down bracket. The Facing Down Communication Box (JNECDB) must be used to give access to data/voice under the beam

power entry basics

Power can enter into Expansion Cityline Desk Structure or EZ Fence Structure from either a Base Feed or a Ceiling Feed. Both can be aesthetically covered by a Power Pole or a Wrap Around Cable Manager. A Split Base Feed can also be used but can only be partially covered by a Wrap Around Cable Manager.

Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use



- 1 96" to 144" high Power Poles can route a Ceiling Feed (JNEPCF) and data cables from the ceiling to the workstation
- 2 29" high Power Pole can route a Base Feed (JNEPBF) and data cables into workstation from the floor
- 3 28" long Wrap Around Cable Manager (JNEWAC) and data cables into workstation from the floor



- Power Pole (JNEWPP)
- Connected to the desk structure or EZ Fence Structure routes a Base or Ceiling Feed and data cables into workstation.
- Available with Floor Screen, Structural Leg/Beam or Low Structural Leg/Beam mounting option
- This product is available 29" high for Base Feed and 96", 120" and 144" high for Ceiling Feed

Finishes: Foundation, Mica and Accent

Wrap Around Cable Manager (JNEWAC)

- Offers maximum flexibility especially when the feed location is unknown
- Wraps around and routes power and data cables from floor to workstation or from freestanding height adjustable table to workstation
- Available in Base Feed (B) configuration in lengths of 28" or 38"
- Available in Height-Adjustable Table (H) configuration in lengths of 42" or 52"
- Finishes: Black (B) and Grey (G)

power entry basics (continued)

All feeds come with a mesh end for maximum flexibility in structural beam





- Connects to the building supply. Routes power from the floor into desk structure, then on a Power Box (JNEPB), a Four-Way Splitter (JNEPDB) or an I-Connector (JNEPIC)
- Wire systems include:
 - 7-Wire Dual Non Isolated (7K)
 - 7-Wire Non Isolated Ground (7T)
 - 8-Wire Isolated Ground (8T)
 - 8-Wire Dual Isolated (8K)
 - This product is available in 36" and 72" watertight cord length to be cut on-site
 - Offered in Standard (S) or PVC Free (V) option

Ceiling Feed (JNEPCF)

- Includes a junction box to connect to the building supply. Routes power from the ceiling into desk structure, then on a Power Box (JNEPB), a Four-Way Splitter (JNEPDB) or an I-Connector (JNEPIC)
- Wire systems include:
- 7-Wire Dual Non Isolated (7K)
- 7-Wire Non Isolated Ground (7T)
- 8-Wire Isolated Ground (8T)
- 8-Wire Dual Isolated (8K)
- This product is available in 96", 120" and 144" cord length
- Offered in Standard (S) or PVC Free (V) option



Split Base Feed (JNESBF)

- Same as the Base Feed, except that its hard wire is split in a junction box for New York city wiring requirements
- Junction box comes with mounting bracket which must be installed under the structural beam
- Wire systems include:
 - 7-Wire Dual Non Isolated (7K)
 - 7-Wire Non Isolated Ground (7T)
 - 8-Wire Isolated Ground (8T)
 - 8-Wire Dual Isolated (8K)
- This product is only available in 36" and 72" watertight cord length to be cut on-site
- Offered in Standard (S) or PVC Free (V) option

planning with power entry

The following should be considered when planning power entry in Expansion Cityline.

base feed and ceiling feed configuration

Standard infeeds installed at one end of structural beams can only reach the next power cut-out location

directly on power box

facing sides

facing down



Structural Beam 30" - 42"

Infeeds must be installed at least 12" away from the centre of the Facing Down Power Module

Power Box (JNEPBD)
Base Feed (JNEPBF) or> Ceiling Feed (JNEPCF)

Structural Beam 36" - 42"







Structural Beam 48" - 84"

base feed and ceiling feed configuration (continued)

Reaching other power locations can be accomplished by adding an I-Connector (JNEPIC) or a Four-Way Splitter (JNEPDB) to lengthen the infeed with a Power Harness (JNEPH). For Power Harness length, refer to Power Distribution in this section



Structural Beam 48" - 84"

Reaching other power locations can also be achieved by installing the infeeds elsewhere along the beam

installed along the beam

facing sides

Infeeds must be installed from 9" to 18" away from the centre of the Facing Sides Power Module



Structural Beam 36" - 84"

facing down

Infeeds must be installed from 12" to 18" away from the centre of the Facing Down Power Module



Structural Beam 42" – 84"

application guide

planning with power entry (continued)

split base feed configuration

Split Base Feeds installed at one end of structural beams can only reach the next power cut-out location

directly on power box

facing sides

Junction box must be installed underneath the Facing Sides Power Module



Structural Beam 30" - 42"

facing down

Junction box must installed next to the Facing Down Power Module



Structural Beam 42"



split base feed configuration (continued)

Reaching other power locations can be accomplished by adding an I-Connector (JNEPIC) or a Four-Way Splitter (JNEPDB) to lengthen the infeed with a Power Harness (JNEPH). For Power Harness length, refer to Power Distribution in this section



Structural Beam 48" - 84"

Reaching other power locations can also be achieved by installing the split base feed elsewhere along the beam

installed along the beam

facing sides

Junction box must be installed from 0" to 18" away from the center of the Facing Sides Power Module



facing down

Junction box must be installed from 9" to 18" away from the center of the Facing Down Power Module



Structural Beam 48" – 84"

power pole with base feed - mounting option

- Available in 29" nominal height
- Available in two mounting options: Floor Screen (G) and Structural Leg/Beam (S)
- Power Pole will **not** interfere with Suspended Credenzas (JNBSF, JNBDF, JNBSO, JNBDO, JNBSOO, JNBDOO, JNBSC, JNBDC). However it will interfere with EZ Suspended Storage (JZBSO, JZBDO, JZBFF)

floor screen mounting option

- When Power Pole is used Floor Screens (JNSFSB, JNSFSW, JNSFGB, JNSFGW, JNSFSL, JNSFGO) and/or Floor Screen with Metal Towers Leg-Mounted One User (JNSFOL, JNSFDL, JNSFTL), the Pass-Through option must be specified accordingly. Refer to the Workstation Screens, Leg-Mounted Screens & Desk Structures sections for details
- Not compatible with double overlay floor screens over 84" wide
- When Floor Screen (G) mounting option is specified, Power Pole comes with a top cover
- Power Poles are also compatible with Beam Towers End Position when specified with the Pass-Through option



Floor Screen & Floor Screen with Metal Tower – Single-Sided



Floor Screen – 84" width or less Double Overlay

power pole with base feed - mounting option (continued)

structural leg/beam-mounting option

- When used with Structural Beam (JNDBB), Structural Post (JNDPU), Structural Post with Front Leg (JNDPF), Structural Legs (JNDLS, JNDLD, JNDLF), Power Pole comes with an extension cover to fit with the levelling range of any Expansion Cityline supports
- Needs a beam for attachment. At 29" high, the Power Pole cannot be mounted to Legs or Posts
- Can be installed at each 3" increment of Structural Beam or EZ Fence Beam for an off-module application
- The on-module position is not available with Facing Down Power Box mounted in the Left or Right position
- Not available for Low Fence application



Beam On-Module - Single-Sided



Beam Off-Module



Beam On-Module - Double-Sided



Beam On-Module - Beam Junction



Fence - Standard Height



Leg

power pole with ceiling feed - mounting option

- Available in 96", 120", 144" nominal heights
- Available in three mounting options: Floor Screen (G), Low Structural Leg/Beam (L) and Structural Leg/Beam (S)

floor screen mounting option

- When Power Pole is used with Floor Screens (JNSFSB, JNSFST, JNSFSW, JNSFGB, JNSFGW, JNSFGD) and/or Floor Screen with Metal Towers Leg-Mounted – One User (JNSFOL, JNSFDL, JNSFTL), the Pass-Through option must be specified accordingly. Refer to the Workstation Screens, Leg-Mounted Screens & Desk Structures sections for details
- Not compatible with double overlay floor screens over 84" wide
- Power Poles are also compatible with Beam Towers End Position when specified with the Pass-Through option



Double Overlay

power pole with ceiling feed - mounting option (continued)

low structural leg/beam attached

- Can be installed at each 3" increment of Double-Sided Structural Beams or EZ Fence Beams for an on- or off-module application
- Can be attached to a Low Structural Leg Fence (JNDLLF), EZ Fence Leg Low Height (JZSFL), Structural Beam (JNDBB or JNDCB) or a EZ Fence Beam (JZSBB or JZSCB)



Low Structural Leg - Fence



Low Beam On-Module - Fence



Low Beam Off-Module - Fence

power pole with ceiling feed - mounting option (continued)

structural leg/beam attached

- Can be installed at each 3" increment of Single-Sided Structural Beams or EZ Fence Beams for an off-module application
- Can also be attached to Structural Legs, EZ Fence Legs or EZ Structural Legs



Structural Leg – Single-Sided



Beam On-Module - Single-Sided



Beam On-Module – Near Post Connector



Structural Leg – Double-Sided



Beam Off-Module - Single-Sided



power poles restrictions

- Power Pole cannot be mounted on Freestanding Legs
- Power Pole cannot be mounted on all Elevated Screens styles
- Power Pole cannot be mounted on Freestanding Towers

Power Pole cannot be mounted on the outer side of Floor Screens - Beam-Mounted



Power Pole for Base Feed



Power Pole for Ceiling Feed

- The following width reduction rule must be considered when Power Pole is used in combination with Beam-Mounted Modesty Panels or Floor Screens
- When a Power Pole is used in combination with a Bottom Kit for Structural Beam Reinforced, the positions are limited. Refer to specification software for available positions



Power Pole for Base Feed



Power Pole for Ceiling Feed

power pole capacity



wrap around capacity



wrap around cable manager

- The Wrap Around Cable Manager for Height-Adjustable Table has a diameter of 1" and is available in lengths of 42" (for Standard Height Structural Leg/Beam) or 52" (for Low Height Structural Leg/Beam Fence). It allows routing cables from a freestanding height-adjustable table to the bottom of a structural beam (shown), EZ Fence Beam or to the underside of a worksurface.
- The Wrap Around Cable Manager for Base Feed has a diameter of 2" and is available in lengths of 28" (for Low Height Structural Leg/Beam Fence) or 38" (for Standard Height Structural Leg/Beam). It allows routing Base Feed/Data cables coming from the floor to the bottom of the structural beam or EZ Fence Beam

under structural beam application



Standard and Extended Ranges

wrap around cable manager (continued)

under worksurface application



wrap around in combination with vertical wire carrier



Length Recommendation

- Low Height (18") = 42" length
- Standard Height (28") = 52" length

Can be used in combination with Wrap Around Cable Manager to manage Height-Adjustable Table wire to the Expansion Cityline Structure

power distribution basics

The following outlines the features of power distribution products in Expansion Cityline.

- Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use
- All dimensions are nominal





Facing Sides (B)



Facing Down (D)

Power Box (JNEPB)

- Attaches inside Structural Beam (JNDBB) or EZ Fence Beam (JZSBB or JZSBS)
- Two Mounting Styles are available:
 - Facing Sides (B) is universal for single- and double-sided application
 - Facing Down (D) can accomodate two Receptacle Outlets. Beam-Mounted Bracket allows the mounting of modular furniture adapter (not included) with modular jacks (not included) or the Communication Extender Plate (JNEDE)
- Power Boxes are two-sided. Can accommodate two Receptacle Outlets (JNEPRO) on single-sided applications and four Receptacle Outlets (JNEPRO) on double-sided applications
- Has two connectors for receiving in-feed and distributing current to the rest of the station
- Wire systems include:
- 7-Wire Dual Non Isolated (7K)
- 7-Wire Non Isolated Ground (7T)
- 8-Wire Dual Isolated (8K)
- 8-Wire Isolated Ground (8T)
- Offered in Standard (S) or PVC Free (V) option

power distribution basics (continued)



- Offered in Standard (S) or PVC Free (V) option
- Finishes: Ebony (YY)*, Storm White (YF), Platinum Grey Coordinate (YN) and Very White Coordinate (YV)
- * When T-Slot (T) or Controlled 20 amp (E) Receptacle Style is specified, only Ebony (YY) finish is available



Four-Way Splitter (JNEPDB)



I-Connector (JNEPIC)





Power Harness (JNEPH)

- Routes power through desk structure by connecting to a Power Box (JNEPB), a Four-Way Splitter (JNEPDB) or a I-Connector (JNEPIC)
- · Power Harnesses are non directional
- Wire systems include:
- 7-Wire Dual Non Isolated (7K)
- 7-Wire Non Isolated Ground (7T)
- 8-Wire Isolated Ground (8T)
- 8-Wire Dual Isolated (8K)
- Lenghts include 18" 144" (3" increments)
- The 18", 21" and 24" long harnesses are mesh construction, all others sizes are metal conduit
- Offered in Standard (S) or PVC Free (V) option

chicago distribution basics

The following outlines the features of Chicago power distribution products in Expansion Cityline.

- Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use
- All dimensions are nominal



- Attaches inside a Chicago Structural Beam (JNDCB) or Chicago EZ Fence Beam (JZSCB or JZSCS) only
- Each end has 1/2" trade size knockout and two additional ones on one face of Junction Box to split the power in other directions or to connect the Chicago Power Module Storage for Height-Adjustability (JNECPH)
- Electrical connections must be done on-site by a certified electrician
- Each end has 1/2" trade size knockout
- Standard feeds and harnesses are not compatible with Chicago Power Box

Finish: Recycled Paint

planning with power distribution

facing side & down restrictions

With Recessed Post with Long Span Kit

The Power Box and Receptacle Outlets are not allowed in either orientations when placed over the recessed post



facing down restrictions only

With Bench Stabilizer

Mounting Brackets of Bench Stabilizer interfere with facing down Power Box



Single-Sided Application

Double-Sided Application

facing down restrictions only (continued)

With Storage for Height-Adjustable, Suspended & Semi-Suspended Credenzas

Mounting Brackets of Storage for Height-Adjustable, Suspended or Semi-Suspended Credenzas interfere with facing down Power Box



With Modesty Panels

Modesty Panel interfere with facing down Power Box



With Elevated Screens, Elevated Corner Screen – Felt and Floor Screens – Beam-Mounted

Mounting Brackets of Elevated Screens, Elevated Corner Screen – Felt or Floor Screen – Beam-Mounted interfere with facing down Power Box

Not applicable with EZ Fence Structure



The following dimensions must be considered when planning power distribution in Expansion Cityline.

- Calculating Power Harnesses length is done by adding and subtracting nominal values of components such as beam width, power box position, power box half or full length and connectors value
- The dimensions listed below are not suitable for Chicago electrical products

component dimensions

structural beam or ez fence beam



power box (JNEPB)

four-way splitter (JNEPDB)

i-connector (JNEPIC)







power harness (JNEPH)



- Equations below are applicable for Facing Sides (Shown) and Facing Down mounting styles
- Both mounting styles can be used in the same beam, but not at the same cut-out location
- Equations below are in the same order than what is seen from left to right and up to down on the illustrations
- Power and Data opening combinations are not all available for Structural Beam Cover Side (JNDBCS). Refer to the specification software for complete offering
- If the result of an equation is under 18", choose the 18" long Power Harness (JNEPH) that comes in flexible mesh construction and allows to be looped inside Structural Beam

determining power harnesses length (facing sides or down) – desk structure or ez fence structure



power entry to power box – opposite right to centered position





18" long Power Harness

power box to power box – opposite right to centered position (for 72" to 84" structural beams only)

determining power harnesses length (facing sides or down) desk structure or ez fence structure (continued)



right to left position (for 54" to 84" structural beams only)



four-way splitter or i-connector to power box opposite right to centered position

four-way splitter or i-connector to power box opposite right to left position



The following examples are not applicable with EZ Fence Structure. For details on page

determining power harnesses length (facing sides or down) – <u>desk structure</u> (continued)

example 1



determining power harnesses length (facing sides or down) – <u>desk structure</u> (continued)

example 2



The example illustrated below is not applicable with Desk Structure

determining power harnesses length (facing sides or down) – <u>ez fence structure</u> (continued)

Each time a harness is crossing a EZ Fence Support, 1 1/2" needs to be added. If needed, the final harness length will then be rounded up to the next available size

example 3



power distribution for height-adjustable run-off basics

The following outlines the features of power distribution products for Height-Adjustable Run-Off in Expansion Cityline.

Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use





Power Module – Storage for Height-Adjustability (JNEPMH)

- A Power Module that includes 1 duplex and 1 simplex to supply power for Height-Adjustable Run-Off and up to two more devices
- Installed inside Storage Cabinet for Height-Adjustable Run-Off (JNHSC)
- Comes with one connector to attach to a Power Box (JNEPB), a Four-Way Splitter (JNEPDB) or an I-Connector (JNEPIC)
- Wire systems include:
- 7-Wire Dual Non Isolated (7K)
- 7-Wire Non Isolated Ground (7T)
- 8-Wire Dual Isolated (8K)
- 8-Wire Isolated Ground (8T)
- Duplex is available in Standard and Controlled 15 amp or T-Slot or Controlled 20 amp outlet configurations consist of Circuits:
- 1 or 2 (use with 7K, 7T, 8K or 8T)
- -3 (use with 7T or 8T)
- 5 (use with 8K or 8T)
- 6 (use with 8K only)
- -A (use with 7K or 7T)
- B (use with 7K only)
- Simplex is available in Standard 15 amp only. Outlet configurations consist of Circuits:
- 5 (use with 8K or 8T)
- 6 (use with 8K only)
- A (use with 7K or 7T)
- B (use with 7K only)
- Offered in Standard (S) or PVC Free (V) option

Finish: Platinum

Chicago Power Module – Storage for Height-Adjustability (JNECPH)

- A Chicago Power Module that includes 1 duplex and 1 simplex to supply power for Height-Adjustable Run-Off and up to two more devices
- Installed inside Storage Cabinet for Height-Adjustable Run-Off (JNHSC)
- Includes the outlets but does not include any connector
- Electrical connection must be done on-site by a certified electrician
- Power Module includes a 90° Strain Relief on top
- Duplex is available in Standard or Controlled 15 amp, or T-Slot or Controlled 20 amp
- Simplex is available in Standard 15 amp only
- Standard feeds and harnesses **cannot** be specified with this module

Finish: Platinum

planning with standard or chicago power distribution for height-adjustable run-off

The following must be considered when planning power distribution with Height-Adjustable Run-Off in Expansion Cityline.

circuit restriction

As Height-Adjustable Run-Off – Bevel Base (JNHB) has a power draw of 300 Watts:

- Cannot connect more than 5 Height-Adjustable Run-Offs per 15 amp circuit

- Cannot connect more than 7 Height-Adjustable Run-Offs per 20 amp circuit

Warning : numbers above are given as a general guideline only. Check local codes and building capacity for potential limits or restrictions on loadings. Local authority approval may be required

structural beam outlets restriction

Receptacle Outlets (JNEPRO) and Chicago Power Box (JNECPB) cannot be mounted in front of Height-Adjustable Run-Off. There will be an interference



planning with standard power distribution for heightadjustable run-off

The following must be considered when planning user power with Height-Adjustable Run-Off in Expansion Cityline.

user power configurations

example 1: without power outlets on structural beam or ez fence beam

- For a single in-feed, avoiding to use power outlets mounted on beam enables a greater number of workstations or a greater number of outlets that can be mounted on or underneath the Height-Adjustable Run-Off. The use of i-Connector or Four-Way Splitter will be required
- Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use



Under Worksurface Power Access

- An Underworksurface Plug-In power Bar (JNEPP) can be connected to the Power Module for Height-Adjustability (JNEPMH)
- Used under a Height-Adjustable Run-Off and supplies power to user for permanent devices





- A Power Qube (JNEPC) can be connected to the Power Module for Height-Adjustability (JNEPMH)
- Used above a Height-Adjustable Run-Off and supplies power to user for temporary devices



Under and Above Worksurface Power Access 3

- An Underworksurface Plug-In Power Bar (JNEPP) and only the Power Qube Dual 1 Power (JNEPCD1_) can be connected to the Power Module for Height-Adjustability (JNEPMH)
- Used under and above a Height-Adjustable Run-Off and supplies power to user for permanent and temporary devices

application guide

planning with standard power distribution for heightadjustable run-off (continued)

user power configurations (continued)

example 2: with power outlets on structural beam or ez fence beam

- For a single in-feed, the use of power outlets mounted on beam power boxes reduces the number of workstations or the number of outlets that can be mounted on or underneath the Height-Adjustable Run-Off
- Up to two Receptacle Outlets (JNPRO) can be used in each workstation. Can be two power outlets, one power and one USB outlets
- Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use



Under Worksurface Power Access 1

- An Underworksurface Plug-In Power Bar (JNEPP) can be connected to the Power Module for Height-Adjustability (JNEPMH)
- Used under a Height-Adjustable Run-Off and supplies power to user for permanent devices





- A Power Qube (JNEPC) can be connected to the Power Module for Height-Adjustability (JNEPMH)
- Used above a Height-Adjustable Run-Off and supplies power to user for temporary devices





Under and Above Worksurface Power Access 3

- An Underworksurface Plug-In Power Bar (JNEPP) and a Power Qube (JNEPC) can be connected to the Power Module for Height-Adjustability (JNEPMH)
- Used under and above a Height-Adjustable Run-Off and supplies power to user for permanent and temporary devices

planning with standard power distribution for hispace or navigate height-adjustable tables

The following must be considered when planning user power with hiSpace or Navigate Height-Adjustable Tables in Expansion Cityline.

user power configurations (continued)

example 1: with facing down power box & height-adjustable tables

- For a single in-feed, using power module mounted on beam reduces the number of workstations or the number of outlets that can be mounted on or underneath the hiSpace or Navigate Height-Adjustable Table
- Up to two Receptacle Outlets (JNPRO) can be used in each workstation. Can be two power outlets, one power and one USB outlets
- · Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use



Under Worksurface Power Access

- An Underworksurface Plug-In power Bar (JNEPP) can be connected to the Receptacle Outlets (JNEPRO) of Power Box (JNEPB)
- Used under a Height-Adjustable Table and supplies power to user for permanent devices





- A Power Qube (JNEPC) can be connected to the Receptacle Outlets (JNEPRO) of Power Box (JNEPB)
- Used above a Height-Adjustable Table and supplies power to user for temporary devices





Under and Above Worksurface Power Access 3

- An Underworksurface Plug-In Power Bar (JNEPP) and a the Power Qube (JNEPC) can be connected to the Receptacle Outlets (JNEPRO) of Power Box (JNEPB)
- Used under and above a Height-Adjustable Table and supplies power to user for permanent and temporary devices

The following must be considered when planning user power entry and power bar with the EZ Fence Suspended Storage in Expansion Cityline.

- The EZ Suspended Credenza installed under the EZ Fence Beam limit the access to power and cable routing
- Only the EZ Suspended Credenza Lateral File and Cubby Shared (JZBSO) and the EZ Suspended Credenza Media Center Single-Sided (JZBSM) are ready to accept a base feed through them. When planning with the other EZ Suspended Credenza, the power needs to be routed outside of the credenza
- Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use





Wire Management Clip

EZ Suspended Credenza – Lateral File and Cubby – Shared (JZBSO)

- This suspended credenza comes with wire management clip to run wire along the bottom of the credenza.
- If needed, Base Feed, Data Cable or Height-Adjustable table wires can be managed by these clips



base feed & power bar access



facing down power box position

Power Box Position with EZ Suspended Credenza – Lateral File and Cubby – Shared (JZBSO)

- Only a Facing Down Power Box (JNSPBD) can be placed over an open section of the credenza. It is **not** allowed to place a Power Box over a File Drawer sections
- It is **not** recommended to use a Facing Side Power Box (JNEPB or JNECPB) with a height-adjustable table as because all wires will be visible on top of the credenza and they will be no cable management solution available



base feed applications





split base feed application

Split Base Feed must be installed underneath the Facing Down Power Box (JNEPBD) when used with an EZ Suspended Credenza – Lateral File and Cubby – Shared (JZBSO). However, one the receptacle outlets of the Power Box will then be obstructed





EZ Suspended Credenza - Media Center - Single-Sided (JZBSM)

- When planning with a Base Feed, the entry point in the EZ Suspended Media Center -Single-Sided, can only be routed through the door sections. A grommet at the bottom of each door section and one Infeed Channel to cover the Base Feed and Data Cables in the section used are included
- These grommets and channels can be used to route Base Feed, Data Cable or Power Cord
- The Base Feed cannot be routed through the center shelf section
- Only Power Cord or Data Cable can be routed through the center shelf section



application guide

planning with standard power distribution for ez fence suspended storage (continued)

- It is recommended to use the Facing Down Power Module (JNEPBD). The cable management will be hidded in de credenza and no wire will be visible on top of the credenza
- It is **not** recommended to use the Facing Side Power Module (JNEPBB) because all wires will be visible on top of the credenza and there will be no cable management solution available

base feed applications

In smallest dimensions, the Power Box must be placed at the opposite side of the base feed entry point



In wider dimensions, the Power Box can be placed on the same side as the base feed entry point. Using opposite sides work as well



In the 66" and up widths, the Power Module can be placed in the middle of the beam, but it is **not** recommended, because the power plugs and wire will be visible in the open section an may interfere with electronic devices placed on the shelf





EZ Off-Module Suspended Credenza – Lateral File and Cubby – Shared (JZBDO)

- When planning with a EZ Off-Module Suspended Credenza, the Base Feed **cannot** enter in the beam through the credenza. It must be routed to the beam outside the credenza
- No removable back panel that allows access to the beam/Power Module
- No Facing Down (D) or Facing Sides (S) mounted Power Box can be installed over the EZ Off-Module Suspended Credenza



application guide

power harness length with standard power distribution for height-adjustable run-off

The following must be considered when planning user power with Height-Adjustable Run-Off in Expansion Cityline.

determining power harnesses length

single- or double-sided (shown) workstation - parallel application



power harness length with standard power distribution for height-adjustable run-off (continued)

determining power harnesses length (continued)

single- or double-sided (shown) workstation - parallel application (continued)



power harness length with standard power distribution for height-adjustable run-off (continued)

determining power harnesses length (continued)

double-sided workstation - offset application (continued)



wiring systems

Four wiring systems are available for Expansion Cityline, 7-Wire Non Isolated Ground (7T), 7-Wire Dual Non Isolated (7K), 8-Wire Isolated Ground (8T) and 8-Wire Dual Isolated (8K). Most common Teknion wiring configurations are achieved with wire systems.

- It is important to specify each power product accordingly with the wire system in use
- For sites where Isolated Ground is **not** available, Teknion offers Non-Isolated Ground options for furniture wiring. The site electrician or electrical contactor/consultant can identify sites where Isolated Ground is **not** available. For those sites, please specify Teknion 7T or 7K wiring systems

. .. .

	No. Regular Circuit	No. Isolated Circuit
7-Wire Non Isolated Ground (7T)		
Neutral (White) Circuit 1 (Black) Circuit 2 (Red) Circuit 3 (Blue) Ground (Green)	4	0
Circuit A (Orange)		
7-Wire Dual Non Isolated (7K)		
Neutral (White) Circuit 1 (Black) Circuit 2 (Red) Neutral (White/Orange) Circuit A (Orange) Circuit B (Blue) Ground (Green)	4	0
8-Wire Isolated (8T)		
Circuit 1 (Black) Circuit 2 (Red) Circuit 3 (Blue) Neutral (White) Ground (Green) Isolated Circuit 5 (Orange) Isolated Neutral (White/Orange)	3	1
Isolated Ground (Green/Orange)		
8-Wire Dual Isolated (8K)		
Circuit 1 (Black) Circuit 2 (Red) Neutral (White) Ground (Green)	2	2
Isolated Circuit 5 (Orange) Isolated Circuit 6 (Blue) Isolated Neutral (White/Orange) Isolated Ground (Green/Orange)		

	Wiring System				
	7T	7K	8T	8K	
Regular Circuit 1 Receptacle	1	1	1	1	
Regular Circuit 2 Receptacle	1	1	1	1	
Regular Circuit 3 Receptacle	1		1		
Isolated Circuit 5 IG Receptacle			1	1	
Isolated Circuit 6 IG Receptacle				1	
Regular Circuit A Receptacle	1	1			
Regular Circuit B Receptacle		1			

receptacle outlets

• Outlets are available in 15 or 20 amp

wiring system/receptacles



- Outlets are available with marking indicating it is connected to a control system in both 15 and 20 amp options
- The 20 amp is only available in Black

planning with chicago power distribution for heightadjustable run-off

The following must be considered when planning user power with Height-Adjustable Run-Off in Expansion Cityline.

- All cables illustrated in dash below must be supplied and connected by a local electrician
- Standard feeds and harnesses cannot be specified with all Chicago electrical products

determining required components

single- or double-sided (shown) workstation - parallel application



planning with chicago power distribution for heightadjustable run-off (continued)

determining required components (continued)

single- or double-sided (shown) workstation - parallel application (continued)



double-sided workstation - offset application



planning with chicago power distribution for heightadjustable run-off (continued)

determining required components (continued)

double-sided workstation - offset application (continued)



power & communications management and user access

Cable management and user access to power/communication must be considered when planning workstations in Expansion Cityline.

Worksurfaces can be mounted on or without Structural Beam. Both mounting styles require different components to provide access to power/communication and for cable management

beam-mounted worksurfaces





Access Door (JNEAD)

- Access Door can be specified as an option on worksurface or can be field-installed for direct access to beam-mounted power/data
- Pivoting door provides two access for cables: on back for permanent devices and in front for daily use cables
- Cannot be used with Height-Adjustable Tables

1/2

Finishes: Foundation, Mica and Accent



Cable Tray for Access Door (JNEWMT)

- The cable tray for Access Door attaches to the underside of a worksurface to manage extra wires from user devices
- Cannot be used with Height-Adjustable Tables
- Finishes: Foundation, Mica and Accent



Communication Box (JNECB)

- The communication box can be attached to the underside of a worksurface to provide communication/data to user
- The communication box must be installed at 1 1/2" away from Access Door side to clear Receptacle Outlets

Finish: Platinum Coordinate

power & communications management and user access (continued)

unstructured worksurfaces & run-off for ez fence





Single Wire Management Clips (JNEWCS)

- Manages and conceals power and data wires underneath the worksurface
- Single Wire Management Clips have flexible flange to retain power cord and smaller cables as data
- Included with worksurfaces for hiSpace or Navigate. Four clips for Rectangular Worksurface and six for 120° Worksurface
- When specified separately, six clips are included on a package

Finish: Black



Cable Tray (JNEWPT)

- Is mounted underneath worksurfaces to manage cables coming from the worksurface level
- Allows installation of Underworksurface Plug-In Power Bar (JNEPP) only
- One is supplied with each worksurface with grommets or Access Door and more can be ordered separately
 Finish: Black

Dual Wire Management Clips (JNEWC)

- Manages and conceals power and data wires underneath the worksurface
- Dual Wire Management Clips have an open section to manage big cables such as power cord/harness and another one with flexible flange to retain smaller cables as data
- Two are supplied with each worksurface and more can be ordered separately

Finish: Black



Underworksurface Plug-In Power Bar (JNEPP)

- This product can be clipped on Cable Tray (JNEWPT)
- Provides a 3-wire system that can be used to connect up to four devices and includes a resettable breaker
- \bullet This product includes 72" or 180" power cord with flat $45^{\circ} \mbox{ plug}$
- Finish: Clear Anodized



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power & communications management and user access (continued)

unstructured worksurfaces & hispace or navigate height-adjustable tables

Felt Cover Cable Organizer (JNEWYA)

- Provides a unique and residential solution for cable management under the worksurface
- Can be used with fixed-height worksurface or Height-Adjustability products
- NOTE: Can interfere with a worksurface cut-out, worksurface structure or screen bracket. Possibility and position must be validated with specification software
- Two configurations are available:
- Small Cable Organizer (01)
- Large Cable Organizer (03)
- Felt Cover Size:
- 28" w x 6" d (Small)
- 28" w x 7 1/2" d (Large)
- Three Velcro' bands are included for wire management

Felt Finish: Grey Felt only Mounting Bracket Finishes: Anthracite



Small Cable Organizer (01)



Large Cable Organizer (03)



Navigate Height-Adjustable Table Applications

- Opened on one side to allow access to Navigate external and Cross Channel Integrated Powerbars
- Large Cable Organizer is compatible with 29" deep Rectangular Worksurface for Navigate Base only
- \bullet Small Cable Organizer is compatible with 23" and 29" deep Rectangular or 120° Worksurface for Navigate Base
- Compatible with 46" to 82" wide Rectangular Worksurface and 46" to 64" wide 120° Worksurface for Navigate Bases
- Also compatible with 43" wide 120° Worksurface on the side with the leg positioned at standard position only



hiSpace Height-Adjustable Table Applications

- The Cable Organizer with Felt Cover (JNEWYA) is optional with hiSpace Height-Adjustable Mechanism. Comes with hiSpace table mechanism or be retrofittable if it has **not** been selected previously
- Large and small Cable Organizer is compatible with Rectangular or 120° Worksurface for hiSpace Quick Connect Height-Adjustable Mechanism
- Compatible with 46" to 70" wide Rectangular Worksurface with User Optimized Width configuration
- Compatible with 52" to 70" wide Rectangular Worksurface with Standard Width configuration
- Also compatible with 49" to 58" wide 120°Worksurface with Standard Width configuration

power & communications management and user access (continued)

The Power Qube is a 3-wire alternative to provide power/communication/USB charging above and under worksurfaces.

- - The product below can be specified separately
 - Power Qube must be plugged into a wall outlet
 - Not all power cord lenghts, plug types and configurations are available. Refer to individual product page for details



- Power Qube (JNEPC)
- Provides power, data or USB charging access above worksurface
- Fits into Square Cut-Out Ring on worksurfaces and is installed without tools. The Square Cut-Out option must be specified on worksurfaces for installation
- Can also be field installed using the template and grommet ring of the Square Grommet (ordered separately)
- Voice/Data jacks are not included and must be field supplied and installed
- IEC Connector (C) is plugged directly into the Frame Integrated Power Bar with IEC Outlet of Navigate Height-Adjustable Base only. Reduces the cable management underneath the worksurface and also removes the cable management outside the table
- Each USB Outlet has one USB-A port and one USB-C port for charging only
- The USB-A port always supplies 10 Watts maximum at 5 Volts DC when used alone
- Standard USB-C Capacity (S):
- The USB-C port supplies 18 Watts maximum at 5 to 12 Volts DC when used alone
- Maximum combined output is 15 Watts when both ports are used together: 5 Watts for USB-A port and 10 Watts for USB-C port
- High USB-C Capacity (H):
- The USB-C port supplies 65 Watts at 5 to 20 Volts DC when used alone
- Due to limitations with transformer design, the maximum combined output is 30 Watts when both ports are used together: 10 Watts for USB-A port and 20 Watts for USB-C port
- This reduced output in dual port mode **will not** support charging of laptops or quick charging of some phones/tablets that require more than 5 Volts DC
- The USB-C port will charge laptops up to 65 Watts and support Quick Charge when used in single port mode
- IEC Connector is **not** available with High Capacity configurations (H)
- Plug-In (A) Connector is plugged directly into standard receptable outlets

Dual Power

Oube (D)

- This product includes 48", 72", 120" or 180" power cord length
- Power cord is a grey cloth covered type
- For more information about IEC Connector option (C), refer to One Table One Plug Application Guide in Complement: Teknion's Ergonomics & Accessories Programm



Finishes

- Case & Front Finishes*: Foundation, Mica and Accent * When Under Worksurface (U) option is specified, the underworksurface bracket will match the Case and Front finish
- Simplex Outlet Finish: Soft Gris
- Two mounting options are available

Square Cut-Out (Q)

- Fits into Square Grommet Ring on Standard Solid Top and a twistable attachment ring allows to tight the Qube casing between the top and bottom worksurface. The Square Cut-Out mounting option must be specified on worksurfaces for installation
- Permanent equipment cords can pass through the square cut-out using the side slot



Under Worksurface (U)

- Fixes below a Standard Solid Top
 - Refer to specification software for Under worksurface Power Qube location

Configuration	D101N	D120S**	D200N	Q202N	Q221H*	Q221S**	Q240S**	Q320H*	Q320S**
Power Simplex Receptacle	1	1	2	2	2	2	2	3	3
USB	0	2	0	0	2	2	4	2	2
Communication Opening	1	0	0	2	1	1	0	0	0

Ouad Power

Qube (Q)

- * H = High USB-C Capacity
- ** S = Standard USB-C Capacity

power & communications management and user access (continued)

The Power Pill provides power/USB charging above meeting table worksurfaces.

- Used with meeting tables only to supply access to electrics
- Cannot be used on Expansion Cityline Worksurfaces
- Can be field-installed as per template included, except for Writable Glass Tables that power module cut-out must be specified in the product due to the glass top that **cannot** be cut on-site
- Plugs directly into standard receptacles



power & communications management and user access (continued)

The Linear Power Module provides power/communication/USB charging above meeting table worksurfaces.

- Used with meeting tables only to supply access to electrics
- Cannot be used on Expansion Cityline Worksurfaces
- Can be field-installed as per template included, except for Writable Glass Tables that power module cut-out must be specified in the product due to the glass top that **cannot** be cutted on-site
- Plugs directly into standard receptacles

module configurations







Compact 8"– 2 Power/2 USB/0 Media (C0220)

Compact 8"-3 Power/0 USB/0 Media (C0300)

 Are not included with meeting tables, refer to Meeting Table Configurations & Supports Chart in Meeting Tables section for more details



• Are available with 72" or 180" long with 3-prong straight plug

Pivoting Retractable Doors

Module Position

As cut out in table for Lateral Power Module is $4 \frac{1}{2}$ by $7 \frac{7}{16}$ linear, unit may be oriented in 1 of 2 directions



power & communications management and user access (continued)

Grommets provide aesthetic cables management when needed.





Square Grommet (JNEGQ)

- Square Cut-Out option must be specified on worksurfaces for an easy installation
- Grommet can also be field-installed as per template provided when cable management is needed
- The Square Grommet Ring allows installation of Dual or Quad Power Qube (JNEPC), which are not included and must be specified separately
- · Cover can be secured in place with provided wood screws
- Aluminum Cover Finishes: Foundation, Mica and Accent Plastic Ring Finish: Soft Gris Coordinate (B)
- Square Grommet mounting:





Rectangular Grommet (JNEGR)

- Rectangular Grommet option on worksurfaces or Diamond Cut-Out option on worksurfaces for hiSpace or Navigate Height-Adjustable Table must be specified for an easy installation
- Grommet can also be field-installed if specified separately as per template provided when cable management is needed
- Rectangular Grommet can be interchanged with Mast Monitor Arm – Expansion Grommet or Swerv Monitor Arm – Diamond Grommet mounting option and vice versa

Cover Finishes: Foundation, Mica and Accent

Plastic Ring Finish: Ebony (52)

• Rectangular Grommet mounting:



Gable Pass-Through Cover (JNEGPC)

- Covers the Gable Pass-Through ring and can be specified separatly when pass-through is not used
- Finishes: Foundation, Mica and Coordinate Colors*
- **Coordinate Colors** are solid colors that can be used to match wood print: Royal Cherry (M8), Ivory Birch (NB), Provincial Oak (NC), Coastal Elm (ND), Northem Ash (NJ), Essential Oak (NN), Essential Walnut (NW), Smoked Oak (NX), Basalt Walnut (PU), Craft Walnut (PZ), Stainless (Q6), Mercurial Walnut (Q9), Choice Maple (R9), Estate Cherry (V1), Campus Oak (VD), Flax Reflect (VL) and Pecan Reflect (VV)