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Introduction

RACE® is the high performance, responsive furniture system incredibly well-suited for today's fast-paced business environment.

Designed by Douglas Ball, RACE is the original off-modular, stackable spine wall system. It promotes open communication, provides unsurpassed technological capability, and welcomes facility churn in the most hospitable fashion.

RACE embodies sleek aesthetics and design simplicity. Truly a marvel to look at, RACE engineering is equally amazing. A central main beam serves as the foundation for support components, allowing you to place the tools of your trade anywhere you need them.

The RACE main beam, mini beam, and upper structure: design elegance meets unrivaled performance.

Embrace Change

Don't be overwhelmed by it. For a change. People coming and going? Workspaces being moved around and resized? In a word, RACE is your panacea.

Think Off-Modularity

RACE allows you to easily position and reposition workstation components — and mini beams — almost anywhere along the main beam. Overhead storage components are off-modular as well. Share books, binders and files with a friend, or keep them to yourself. What does all of this mean? You're free to reconfigure your RACE work environment anyway you wish. Hassle-free.

Off-modularity: Worksurfaces move anywhere along the main beam mounting channel for reconfiguration ease.

Power and Communication

That's right . . . and at worksurface height. Where it belongs. The RACE main beam houses a superior capacity of power and cable technology.

Accessibility within the beam is effortless as well: a key for initial installation of power feeds and cable lay-in, and for moving electrical and communication components when technology changes and additions demand it.

It's time to get into RACE! It's where you'll find sleek design, high performance, and adaptability . . . in a system that's always a RACE where everyone wins.

Power components and cable installed in separate pathways within the high-capacity RACE main beam.

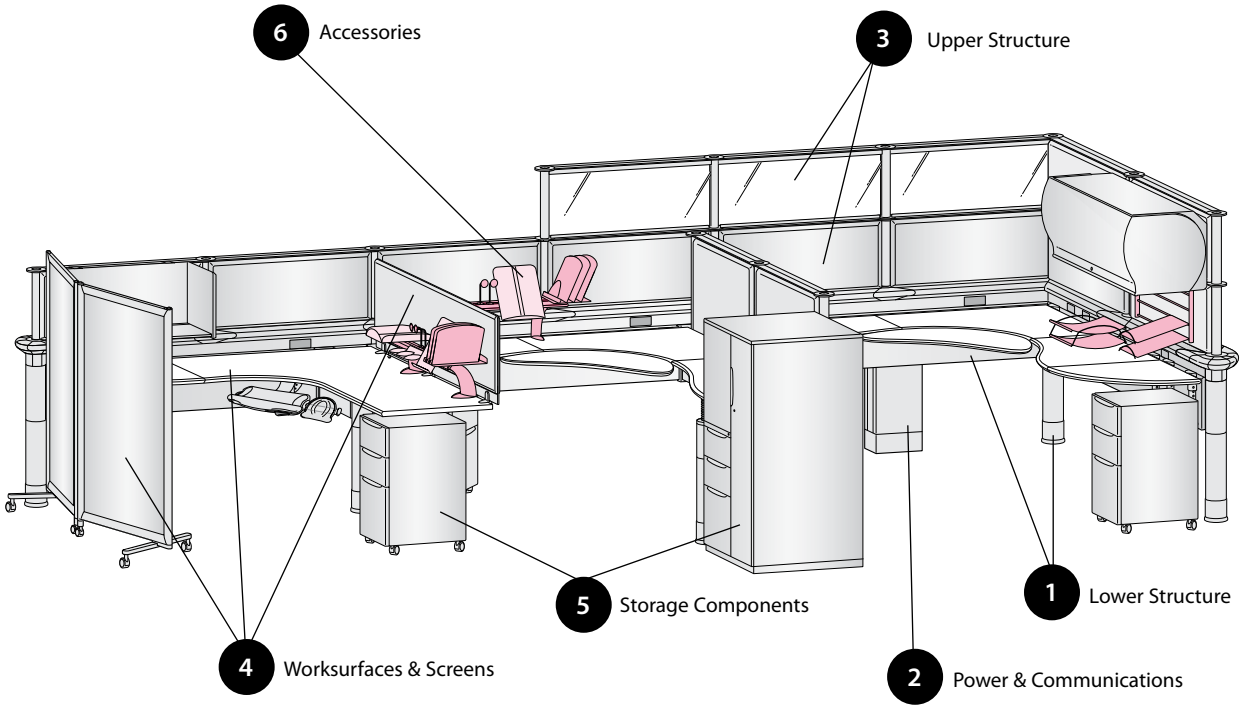
Building RACE

Building an Office in Six Easy Steps

When specifying RACE, start at the bottom and work your way up. First, use main beams and mini beams to divide space within the work environment. Next, determine the power and communications components required to support user needs in each workstation. Then establish varying levels of acoustical and visual privacy with upper structure components. Finally, add functionality to each workspace by specifying worksurfaces, tables, lighting, accessories, and storage components such as pedestals, lateral files, overhead storage units, shelves, and personal storage towers.

When planning RACE, you should generally consider:

- overall environment to be created
- future needs
- privacy and acoustical requirements
- workspace differentiation
- reconfiguration frequency
- technology needs
- budget



Note **Before specifying RACE, you should be well-versed in the features and functions of its electrical and communication system. For details, refer to the Power & Cable Management section.**

Tips

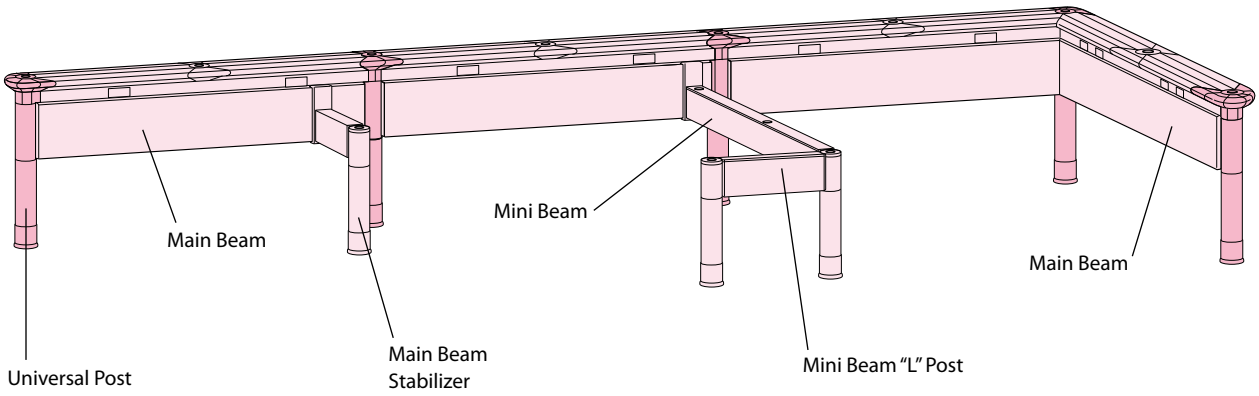
- **The decisions you make in early steps will impact the options available to you in later steps. Therefore, it's helpful to familiarize yourself with the complete RACE product line at the beginning of the process; this way, you'll be able to form a "big-picture" idea of what you want to accomplish before you begin specifying RACE.**
- **It's important for you to determine surface materials and colors to be applied in the work environment. That's because surface material and trim options are embedded within RACE catalog part numbers.**

Step One: Lower Structure

RACE lower structure includes main and mini beams and their supporting structures. Determine the overall length of the primary main beam run(s) required to accommodate the number and size of each workstation connected to the run; you'll also need to determine how many individual main beams will comprise the main beam run. Then specify main beams, mini beams and mini beam posts, and/or main beam stabilizers to form the perimeters of individual workstations. Note that mini beams and main beam stabilizers can move laterally on the main beam, giving you ultimate flexibility for reshaping workstations or more involved reconfigurations.

When planning main beams and mini beams, you should consider:

- workstation footprint(s)
- workstation electrical and communication access location(s)
- building electrical and communication access location(s)
- future needs
- reconfiguration frequency
- need for acoustical or visual privacy

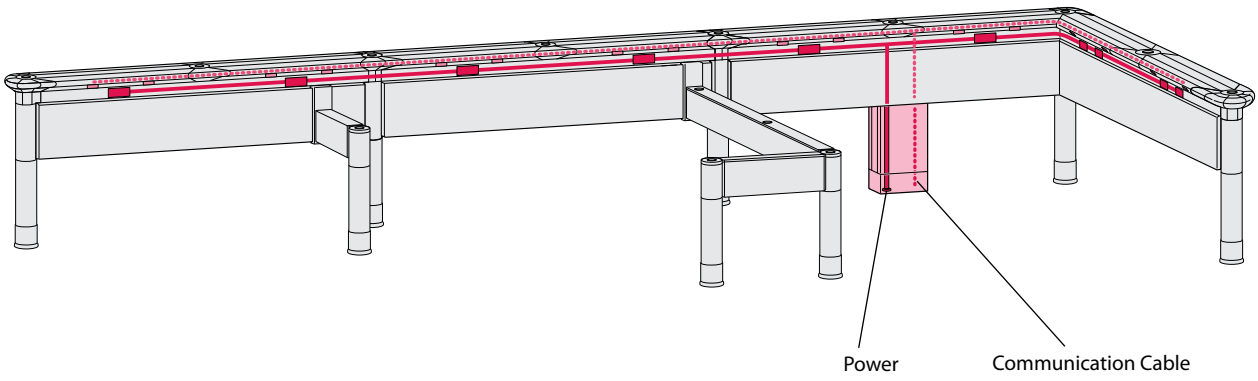


Notes

- **Refer to the Product Details section for more information about Main Beams & Mini Beams.**
- **Refer to the Product Application Guidelines section for information on main beam and mini beam horizontal support and load guidelines.**
- **Refer to the Technical Specifications section for details on the manufacturing process and material composition of main beams and mini beams — and all other RACE components.**

Step Two: Power & Communication

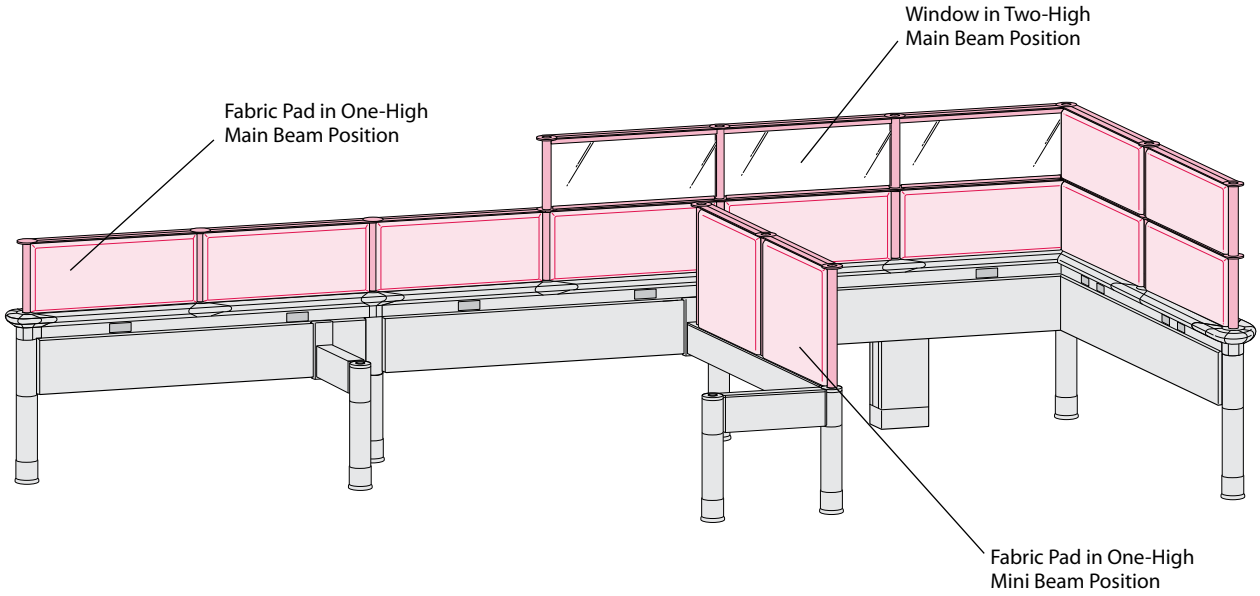
Once the work environment's main beam and mini beam configuration has been established, you can plan and specify the type and quantity of power and communications components required to meet each user's technology needs. As part of this process, you'll need to develop a comprehensive plan for accessing the building's electrical power and communications source, routing power infeeds and cables into the main beam, and distributing power and communications to individual workstations.



Note **Refer to the Power & Cable Management section for information on power and communication planning, as well as power/ cable routing and access options.**

Step Three: Upper Structure

RACE upper structure establishes the level of visual and acoustical privacy for individual workspaces. One- or two-high upper structures mount above the main beam; you can specify fabric pads or windows to be mounted within the post-and-rail upper structure framework. The upper structure also impacts Step Five (storage components), since it supports shelves and overhead storage units at the one- and two-high levels. The RACE grid and accessories, Step Six (accessories), mounts to the upper structure.

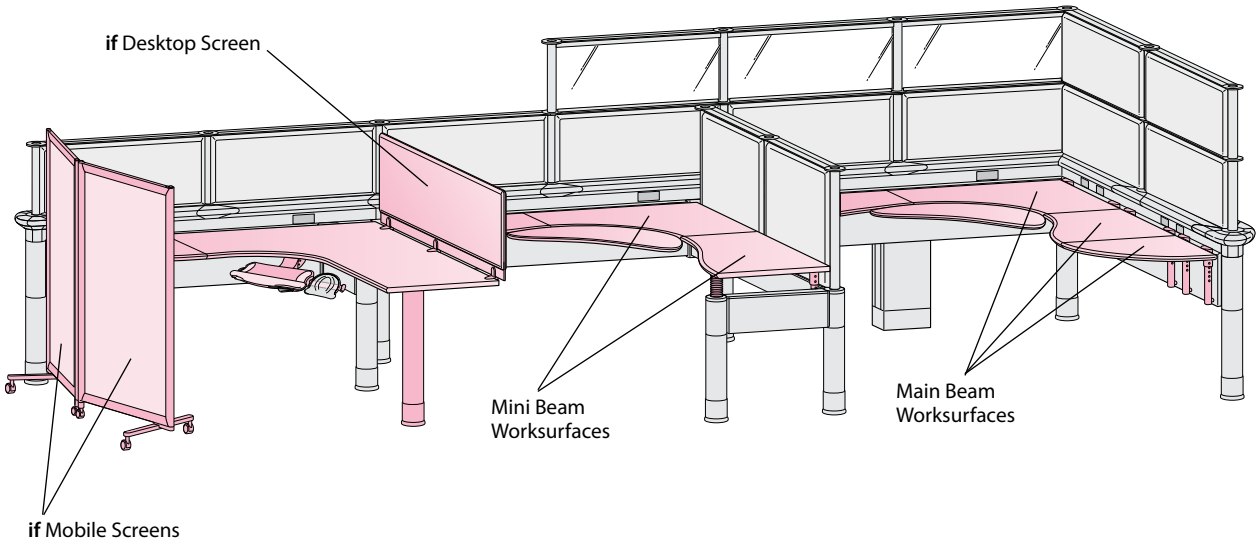


Notes

- **Refer to the Product Details section for more information about the Upper Structure.**
- **Refer to the Product Application Guidelines section for information on upper structure vertical planning guidelines.**

Step Four: Worksurfaces, Tables & Screens

Once the upper structure is specified, you can begin adding the appropriate surfaces for users' work environment needs. RACE offers many different worksurface shapes for main beam and mini beam applications; you can use complimentary freestanding **if** tables for in-office conferencing or additional worktop space. **if** desktop-mounted screens are an alternative to upper structure and pads to provide semi-private workstation(s). **if** freestanding mobile screens offer an attractive, cost-effective way to divide space and create temporary conferencing/meeting areas.



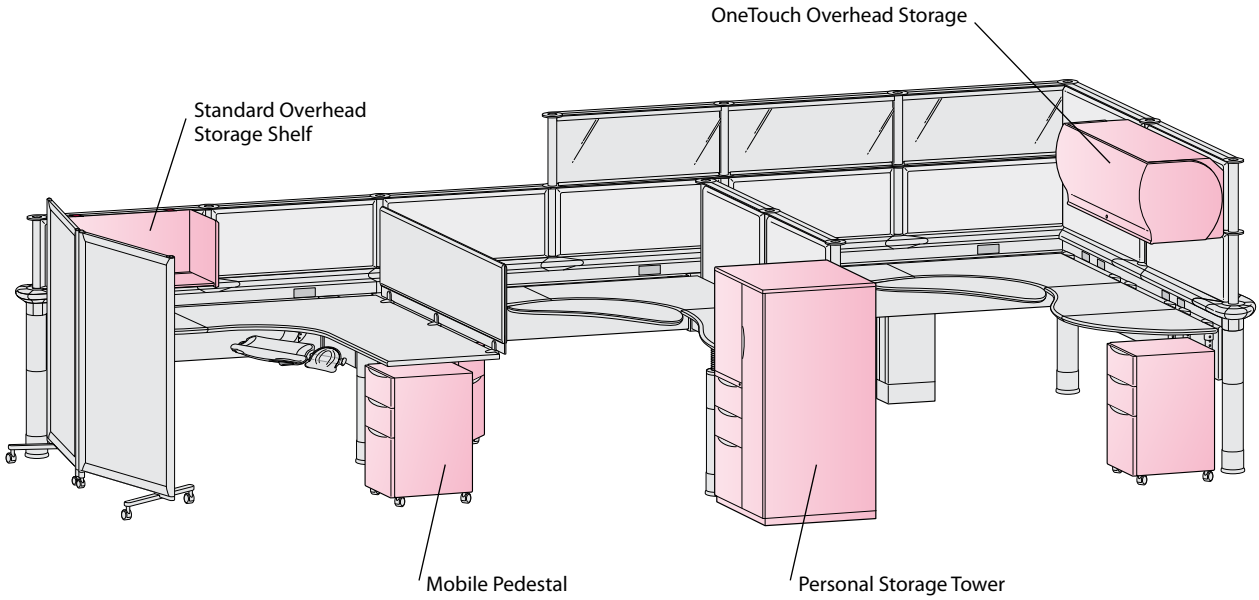
Tip **Main beam and mini beam worksurfaces are shipped with the necessary worksurface support components, such as cantilevers, front and/or rear corner supports, and worksurface support kits.**

Note **Refer to the Product Details section for information about:**

- **Main Beam Worksurfaces, support guidelines, dimensional standards, and application examples.**
- **Mini Beam Worksurfaces, support guidelines, dimensional standards, and application examples.**
- **Worksurface Accessories, including if desktop screens.**
- **if Mobile Screens.**
- **if Tables.**

Step Five: Storage Components

You'll complete the basic structure of your RACE workspace with the specification of storage components. These components include shelves, overhead storage units, pedestals, lateral files, and personal storage towers. With these components, you can select from two classic design options — the signature RACE standard or **if** product offerings. With either choice, you'll achieve the same end result: maximum storage efficiency.

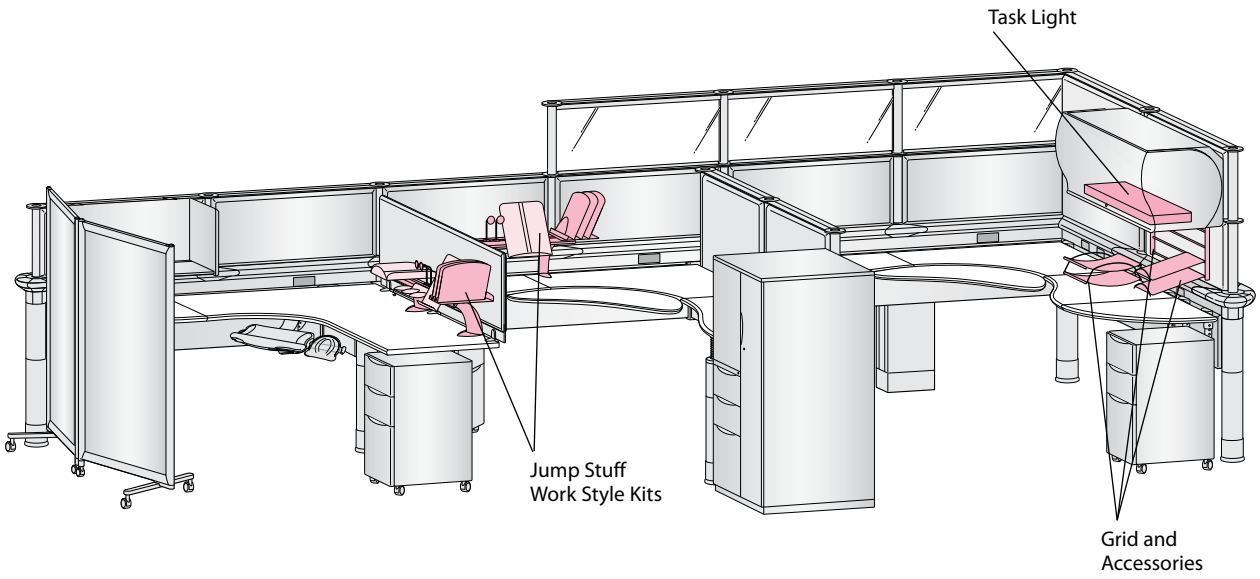


Notes

- **Refer to the Product Details section for information about Storage Components.**
- **Refer to Product Application Guidelines section for information on horizontal support and load guidelines affecting specification of shelves and overhead storage units.**

Step Six: Lighting & Accessories

Finish defining your RACE work environment by specifying lighting and accessory products that will enhance each workstation's functionality and ergonomic features. RACE offers several task lighting fixtures. The RACE grid and accessories — and the Jump Stuff work style kits — offer paper management and storage for work tools. Jump Stuff offers freestanding and rail/shelf-mounted lights.



Note **Refer to the Product Details section for information about:**
- **Lighting.**
- **Accessories.**

Specification Checklist

Lower Structure

COMPONENT	FEATURES	FUNCTION
Main Beam	• Standard Electrical • Chicago Electrical	• Supports Worksurfaces; carries power and communication
Universal Post		• Supports Main Beams; attaches to ends of Main Beams. General Rule: For every Main Beam counted, there should be one more Universal Post
Main Beam Stabilizers • Worksurface Support Kit		• Provides return support to Main Beams; separately specify Worksurface Support Kit for heavy load conditions
120˚ Beam Connectors		• Specify for 120˚ conditions
Modesty Panels • Modesty Panel Attachment Kit		• Provides enclosure under Main Beams; separately specify Modesty Panel Attachment Kit
Starter Mini Beam	• Main Beam Channel Attachment • Main Beam Universal Post Attachment	• Attaches to Main Beam channel; no power or communication capabilities • Attaches to center of Universal Post; no power or communication capabilities
Add-On Mini Beam		• Attaches to Mini Beam; no power or communication capabilities
Mini Beam Posts	• Single Post • "L" Post • "T" Post	• Supports Mini Beams without surfaces • Supports Mini Beams with surface one side • Supports Mini Beams with surfaces both sides

Power & Communications

COMPONENT	FEATURES	FUNCTION
Infeed Harness	• Standard Electrical Infeed • Raised Floor Infeed	• Carries power from building to Main Beam
Floor Entry Conduit		• Conceals Infeed Harness
Floor Power and Communications Cover	• Standard Electrical • Chicago Electrical	• Conceals Floor Entry Conduit and communication cabling - For use with modesty - For use without modesty
Ceiling Entry Power Pole • Ceiling Entry Communications Box (optional)	• Power Entry Only	• Provides ceiling routing and access of electrical (separately specify Infeed Harness) and various degrees of communication cabling in the Main Beam. Optional Ceiling Entry Communications box available.
Wall-Mount Power and Communication Entry		• Provides wall routing of electrical (separately specify Infeed Harness) and communication cabling
Receptacles	• Standard Electrical • Chicago Electrical	• Provides various circuit access combinations
Cover Plates	• Hardwire Receptacle Plate • Chicago Electrical Steel Plates	• Hardwire Receptacle Plate offers a plastic plate • Chicago Electrical offers steel plates in various combinations
Power Connectors	• Flexible Power Connectors • Pass-Through Harnesses • Retrofit Kits	• Provides various combinations

Specification Checklist

Upper Structure

COMPONENT	FEATURES	FUNCTION
Main Beam Upper Posts	• 14" Height (One-High) • 28" Height (Two-High)	• Installs into Universal Posts, and at mid-points in beams 72" and 120" long
Mini Beam Upper Posts	• 24" Height (One-High) • 38" Height (Two-High)	• Installs into Mini Beams at connecting end to Main Beam; installs in Single, "L" and "T" Posts; and installs in mid-points in beams 72" and 96" long
Rails		• Provides framework for pad attachment. Attaches to tops of Main Beam and Mini Beam Upper Posts (One-high requires one Rail; Two-High requires two Rails). General Rule: Rail counts should equal Pad/Window counts
Mini Beam Post-to-Upper Post Tie Bar		• Provides additional stability to Mini Beam Upper Structure when Upper Storage is hung on Mini Beam
Mini Beam Post-to-Rail Tie Bar		• Provides additional stability to Mini Beam Upper Structure when Upper Storage is hung on Mini Beam
Acoustic/Tackable Pads	• 14" Height (One-High) • 28" Height (Two-High)	• 2-sided kits supported by Rail and Upper Posts. General Rule: Pad/Window counts should equal Rail counts
Windows • Glass • Acrylic	• 14" Height (Main & Mini)	• Single pane supported by Rail and Upper Posts. Glass pattern faces into workstation. General Rule: Pad/Window counts should equal Rail counts

Specification Checklist

Worksurfaces, Tables & Screens

COMPONENT	FEATURES	FUNCTION
Main Beam • Rectangular • Inverse Swells • 120° Link • Swells • Transitions • 90° Corners • 120° Corners • Curved Wrap-Around Extended - Convergent Support Kits • Wrap-Around "D" • Convergents • Curved Enders • Conference Ends • Curved Links	• 16", 24", 28" Depths vary • 4" Modular Width • Standard Edge • Cascade Edge • Wood (limited)	• Specify Convergent Support Kit when ordering Curved Wrap-Around Worksurface top only (specify supporting pedestal separately). • Standard Edge Worksurfaces predrilled to accept Standard Pedestals
Mini Beam • Curved Wrap-Around Extended • Extended Corners • Rectangular • Inverse Swells • Swells • Transitions • 90° Corners	• 16", 24", 28" Depths vary • Standard Edge • Cascade Edge • Wood (limited)	• Standard Edge Worksurfaces predrilled to accept Standard Pedestals
Keyboards		• Various options provide keyboard and mouse support
Counter Tops	• Standard Edge • Cascade Edge • Wood (limited)	• Counter Top shape/length corresponds with overall Main Beam shape/length. General Rule: Two Counter Tops cannot be installed next to each other in straight-line or 90° conditions
if Tables	• Cascade Edge	• Provides additional work or conferencing surfaces
if Desktop Screens • Fabric Tackable • Frosted Acrylic	• 18" Height	• Provides division of space; attaches to sides or ends of Worksurfaces. General Rule: Installed height will match one-high Main Beam Pad/Window height
if Mobile Freestanding Screens • Markerboard/Fabric Insert • Markerboard/Frosted Acrylic Insert • Markerboard/Perforated Metal Insert • Full Fabric Insert • Full Frosted Acrylic Insert • Full Perforated Metal Insert	• 47" Height • 52" Height • 63" Height	• Provides division of space

Specification Checklist

Lower Storage

COMPONENT	FEATURES	FUNCTION
Pencil Drawers • Plastic • Steel		• Provides storage under Worksurfaces
Pedestals • Standard • X Series		• Provides storage under Worksurfaces - Standard Edge Worksurfaces predrilled to accept Standard Pedestals
Lateral Files • 950 Series • X Series		• Provides storage under Worksurfaces
Personal Storage Towers • 950 Series • X Series		• Provides storage

Upper Storage

COMPONENT	FEATURES	FUNCTION
Overheads • Standard Shelf and Storage Unit • OneTouch Storage Unit		• Provides storage above Worksurfaces - Standard Upper Storage accepts Standard Task Lighting - OneTouch Upper Storage accepts OneTouch Task Lighting

Specification Checklist

Lighting

COMPONENT	FEATURES	FUNCTION
RACE Task Lighting • RACE Adaptable Electronic Ballast Task Light • Adaptable Electronic Ballast Task Light	• Standard Electrical • Chicago Electrical	• Standard Upper Storage accepts RACE Adaptable Electronic Ballast Task Light • OneTouch Upper Storage accepts Adaptable Electronic Ballast Task Light
Accent • Jump Stuff		• Provides accent lighting

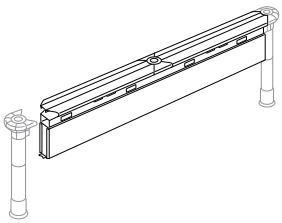
Accessories

COMPONENT	FEATURES	FUNCTION
Jump Stuff	• Worksurface Mounted • Freestanding	• Provides task organization
Grid and Tolls	• Rail Hung	• Provides task organization
Coat Hook		• Provides hook for hanger; Attaches to Rail

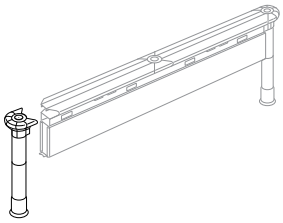
RACE Product Details

Main Beam Statement of Line

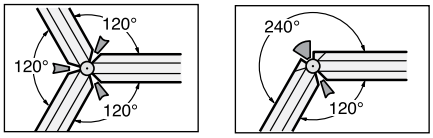
Main Beam



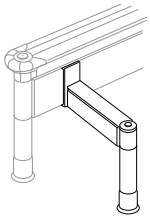
Universal Post



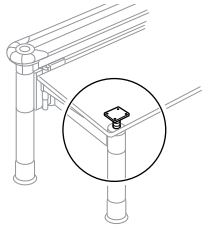
120˚ Beam Connectors



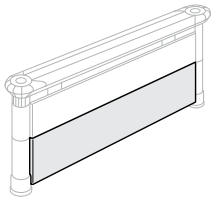
Main Beam Stabilizer



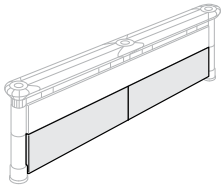
Worksurface Support Kit



Modesty Panels, Solid

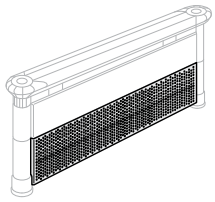


For 36" (914mm)-
to 72" (1829mm)-long beams

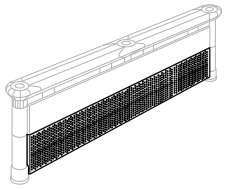


For 84" (2134mm)--
to 120" (3048mm)-long beams

Modesty Panels, Perforated

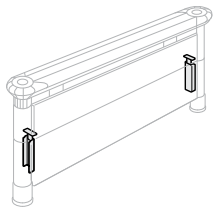


For 36" (914mm)-
to 72" (1829mm)-long beams

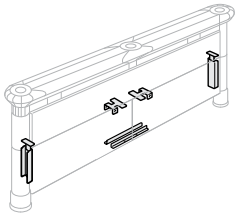


For 84" (2134mm)-
to 120" (3048mm)-long beams

Modesty Panel Attachment Kits



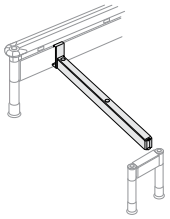
For 36" (914mm)-
to 72" (1829mm)-long beams



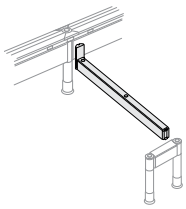
For 84" (2134mm)-
to 120" (3048mm)-long beams

Mini Beam Statement of Line

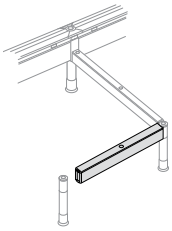
**Starter Mini Beam,
Main Beam Attachment**



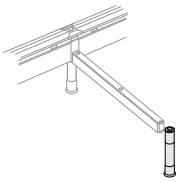
**Starter Mini Beam,
Universal Post Attachment**



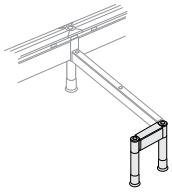
Add-On Mini Beam



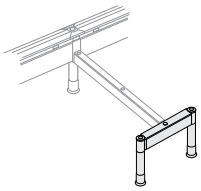
Mini Beam, Single Post



Mini Beam, "L" Post



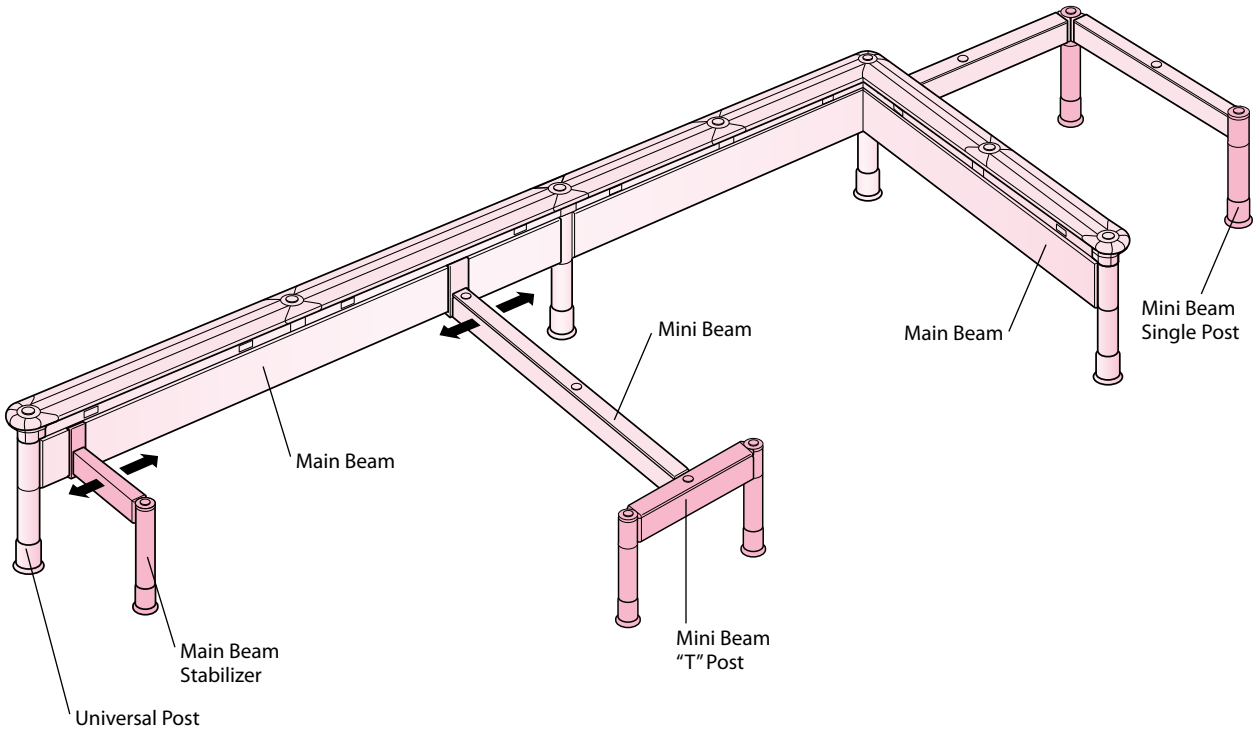
Mini Beam, "T" Post



Main Beam & Mini Beam Overview

The RACE system lower structure is built on a network of main beams, mini beams, and support posts. These elements serve as an incredibly strong, solid foundation for all other components such as the upper structure, worksurfaces, and lower and upper storage.

RACE main beams and mini beams are not only sturdy, they also provide the ultimate in space planning flexibility. That's due to off-modularity: the RACE main beam has a mounting channel that allows lateral/horizontal movement of main beam worksurfaces and mini beam structures.



Note **Power and cable management is available in main beams only. Prior to designing the lower structure layout, thoroughly review the Power & Cable Management section.**

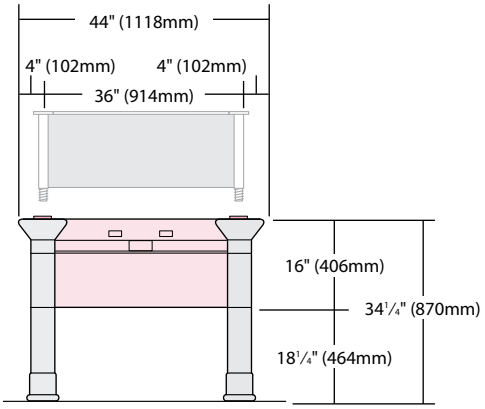
Main Beams

The RACE main beam is the horizontal steel framework that serves as the connection point for all other RACE components.

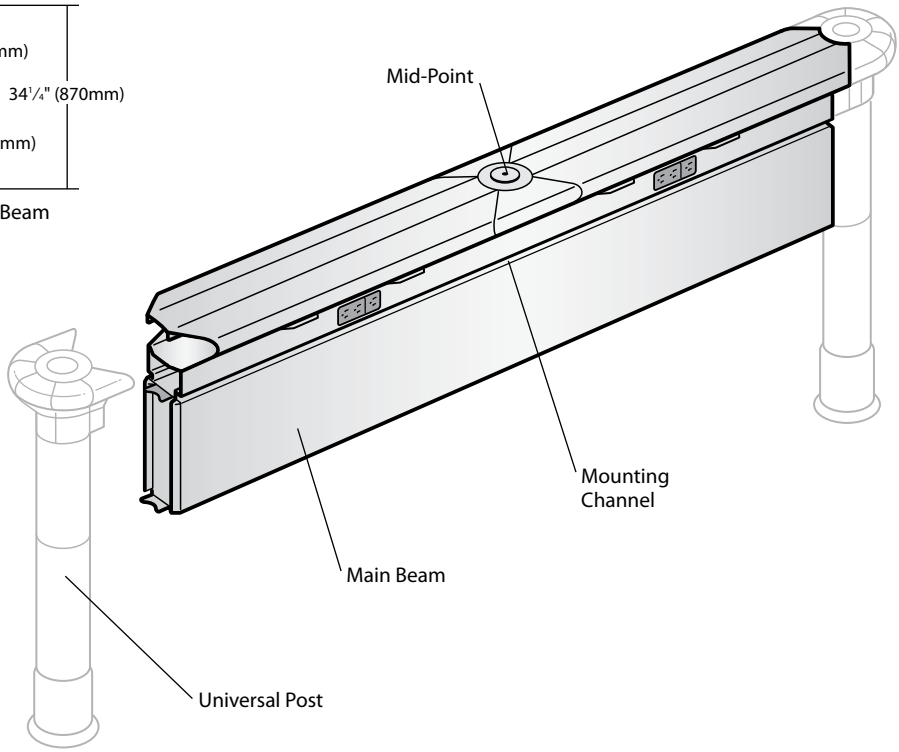
Power and communications are easily installed, accessed, and reconfigured, thanks to RACE main beam engineering and construction. Separate horizontal channels provide for clean separation of power and communications. The removable top simplifies cable lay-in, and there are multiple power and voice/data access points at worksurface height.

Main Beam Details

- Width: 8" (203mm) at top; 4" (102mm) at base
- Height: 16" (406mm); when installed on universal post, 34¼" (870mm)
- Lengths (nominal): 36" (914mm), 48" (1219mm), 60" (1524mm), 72" (1829mm), 84" (2134mm), 96" (2438mm), 108" (2743mm), and 120" (3048mm)
- Supported by universal post or mid-point mounting connection
- Includes a full-length mounting channel for main beam stabilizers, mini beams, and all worksurfaces; the channel extends the full length of the beam between the universal posts
- Beams include a mid-point mounting connection to which other main beams can connect at 90˚



Side View of 36" (914mm)-long Main Beam



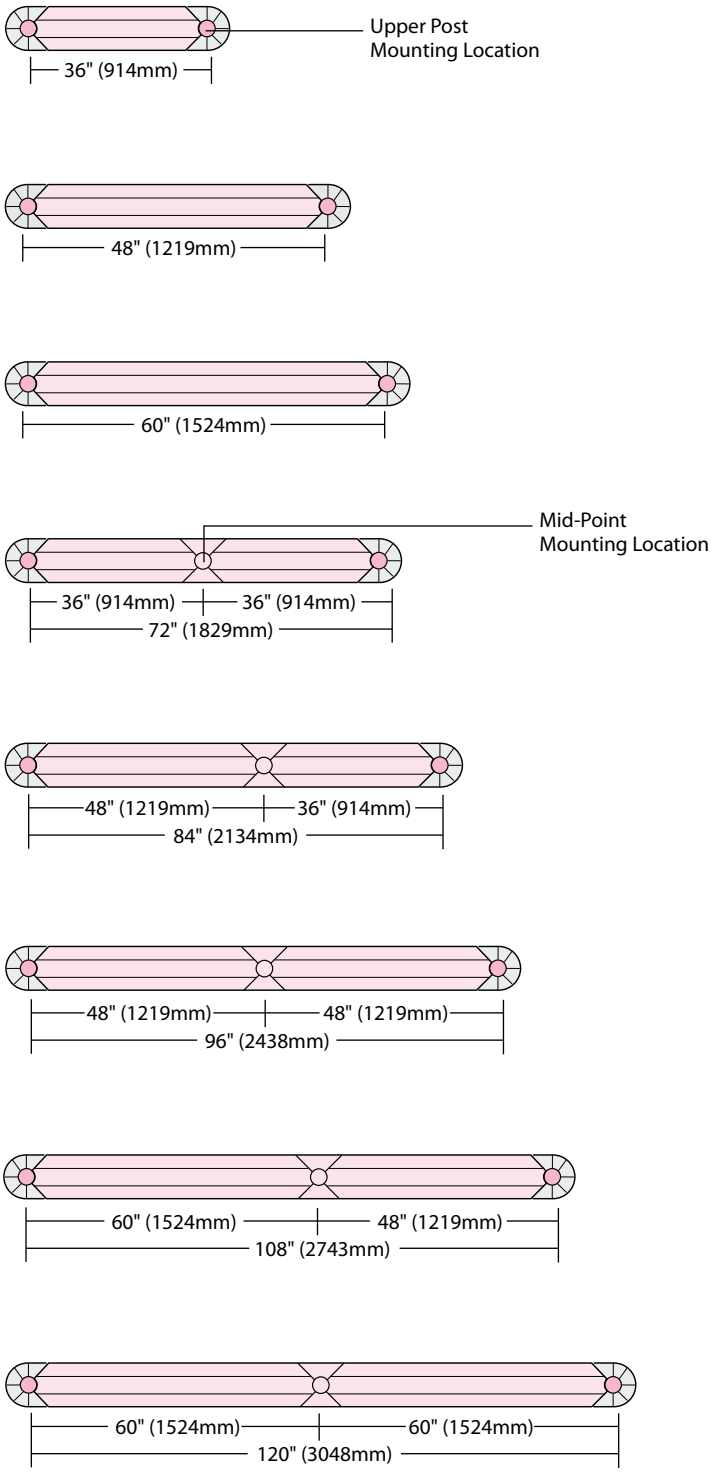
Tip **For maximum design flexibility, specify the longest main beams where possible.**

Notes

- **Nominal main beam length is measured from centerline-to-centerline of the universal post. Example: The overall dimension of a 36" (914mm)-long beam with two universal posts is (36"+4"+4"=44") (1118mm).**
- **For specific details on dimension planning with RACE main beams and worksurfaces, refer to the Worksurfaces section.**

Main Beams

Main Beam Upper Post Mid-Point Mounting Locations: Top Views

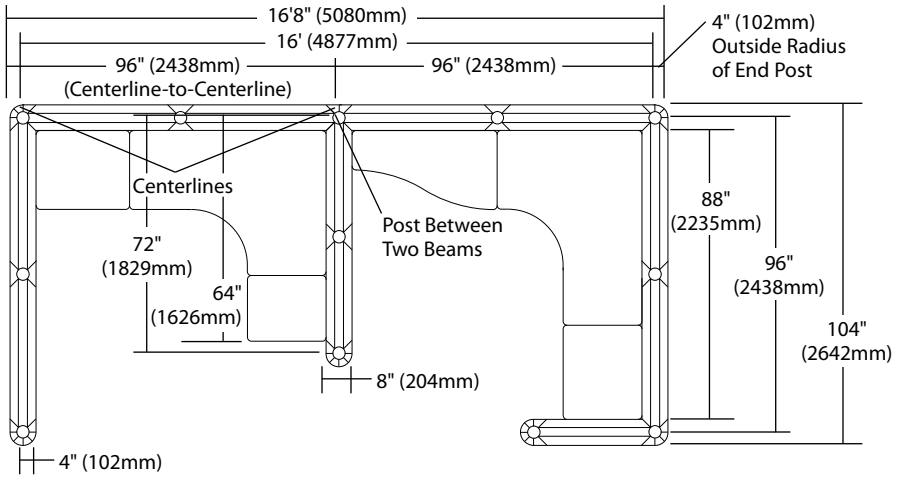


Main Beams

Main Beam Dimension Factors

Because beam dimensions are taken from the centerline of the universal post, no length is added by post junctions in a straight run or at post-and-beam intersections. For example, the centerline dimension of two 96" (2438mm)-long beams is 16' (4877mm); no length is added by the post between the two beams.

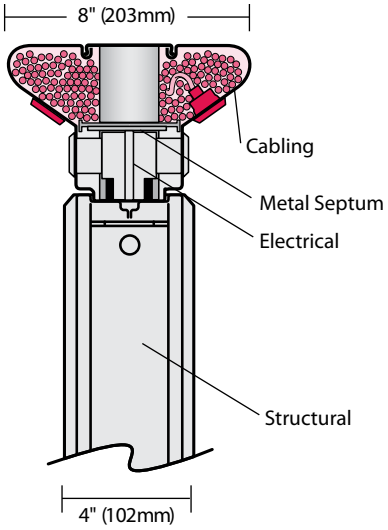
Add the post dimension only at the outside ends of a run or at an outside 90° corner. For example, the end-to-end measurement of two 96" (2438mm)-long beams is 16' 8" (5080mm). This equals the beam length plus the 4" (102mm) outside radius of each **end** post only.



Note **For details on dimension planning for main beam worksurfaces, see Worksurfaces section.**

Main Beam: Power and Cable Management Details

- Constructed with two raceways divided by a metal septum:
  - Top raceway accommodates communication cabling of up to 174 Category 5, 4-pair unshielded twisted pair (UTP) cables (based on 0.20 diameter at 60% fill factor)
  - Powered main beams are shipped with The Power Base electrical distribution assembly and one flexible power connector to continue power from beam to beam
  - Bottom raceway houses the power distribution, which can be accessed from multiple ports on the side of the beam



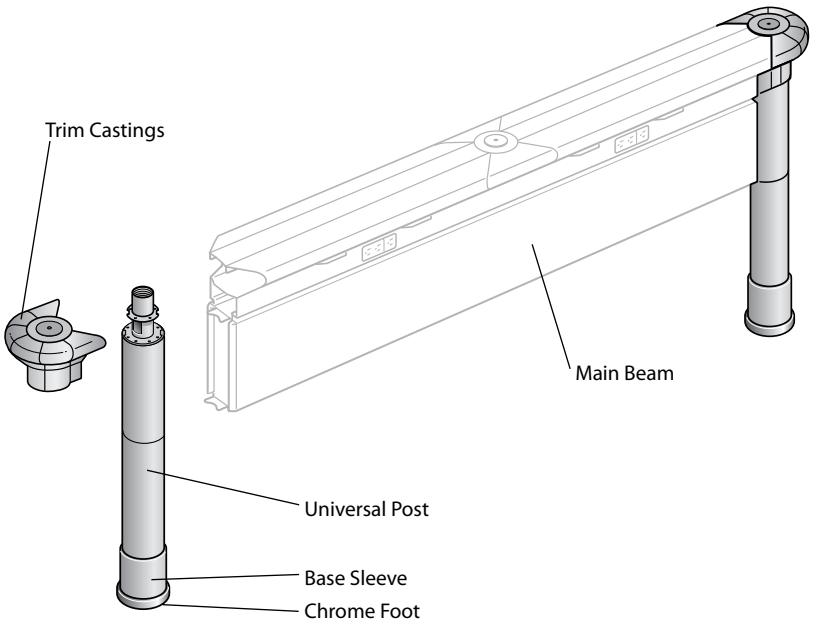
Note **Main beams are also available for Chicago and International power applications; see Price List.**

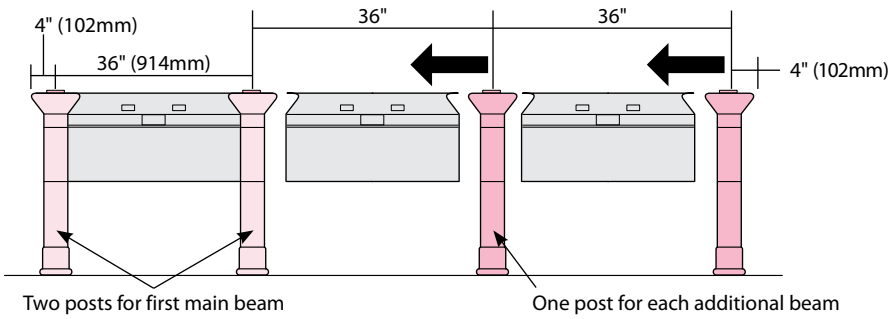
Universal Post

One universal post is used to support the end of the main beam. The post is 4" (102mm) in diameter, which matches the 4" (102mm) width of the lower portion of the main beam. When the trim castings are added to the universal post, the resulting 8" (203mm) width is consistent with the width of the upper part of the beam. Besides supporting the lower structural components of RACE, the universal post also provides mounting locations for main beam upper posts.

Universal Post Details

- Diameter, top trim: 8" (203mm)
- Diameter, post: 4" (102mm)
- Height: 34¼" (870mm)
- Chrome leveling foot at base of post provides a beam height adjustment range of 3" (76mm):
  - from 33" (838mm) to 36" (914mm)
  - a base sleeve conceals the adjustment mechanism
- Constructed to allow continuation of cable and electrical component routing between main beams





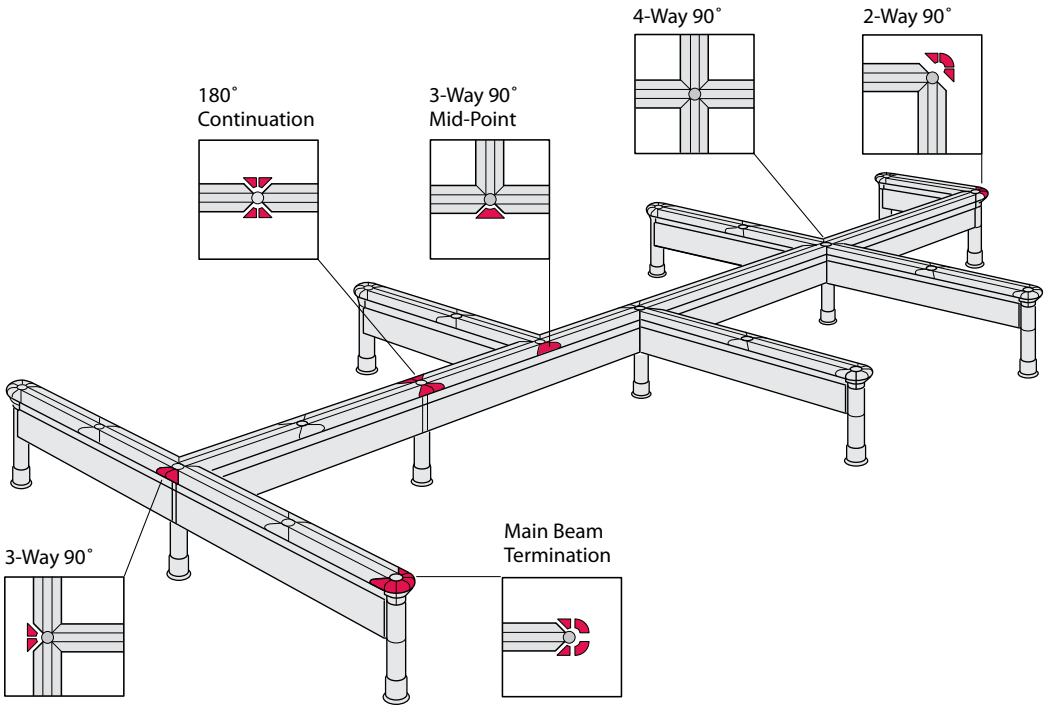
Tips

- **Specify two universal posts for the first main beam in a run.**
- **Specify one post for each added beam.**

Main Beam/Universal Post Configurations

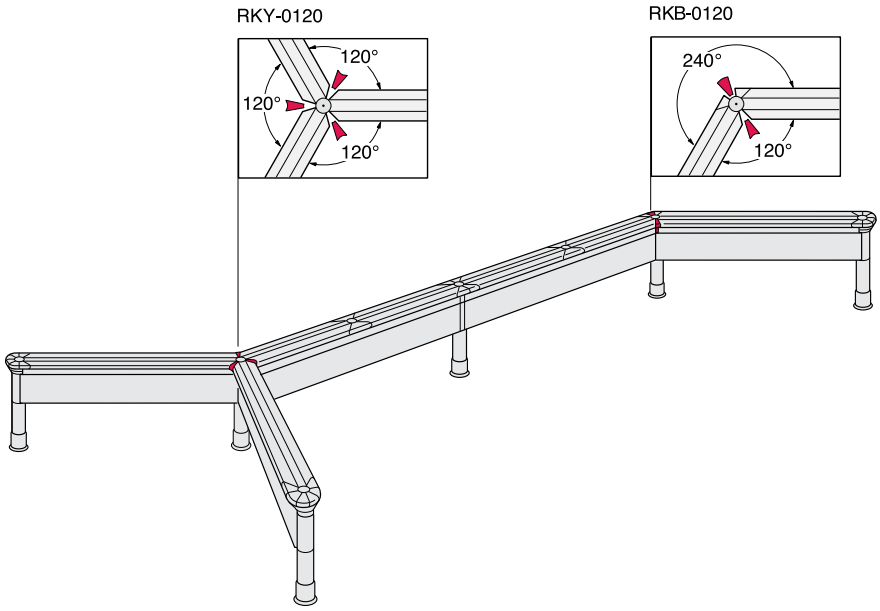
90° and 180° Configurations

Trim piece castings furnished at the top of universal posts are removable. This allows for configuration of beam attachments at 90° and 180°. The following six (6) angles and connections can be made without specifying other connectors:



120° Configurations

When creating 120˚ beam configurations, separately specify a 120˚ beam connector kit.

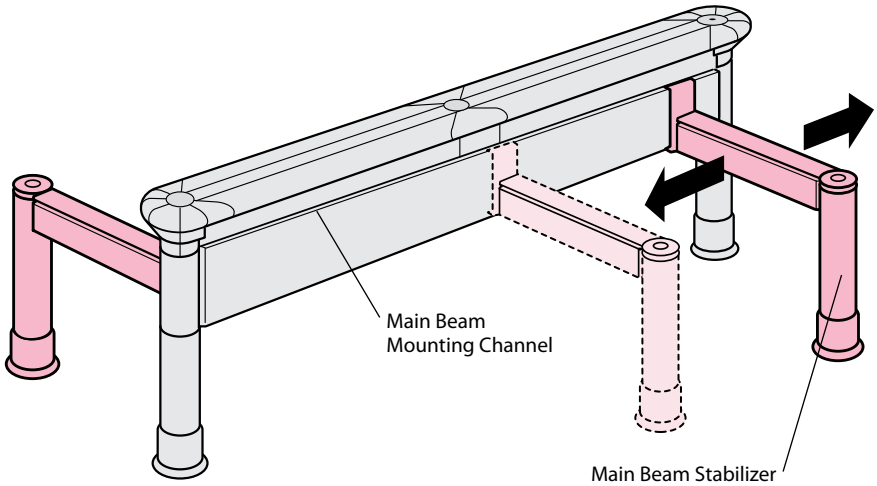


Main Beam Stabilizer

The main beam stabilizer provides extra lateral stability to a main beam run.

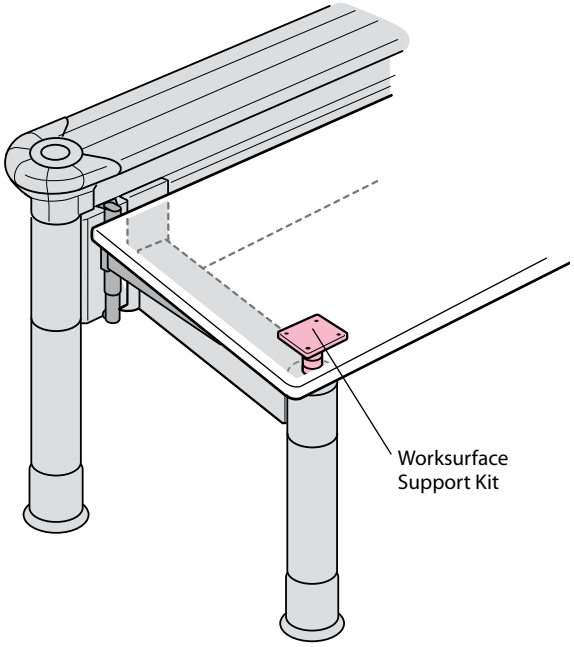
Main Beam Stabilizer Details

- Beam width and post diameter: 4" (102mm)
- Height: 24¼" (616mm)
- Length: 24" (610mm); length supports 24" (610mm)- and 28" (762mm)-wide worksurfaces
- Mounts at any location along the main beam mounting channel
- Does not mount to the universal post
- Separately specified worksurface support kit (RKS-0001) has threaded insert that fits into the top of the stabilizer post; the kit supports the worksurface mounted above it



Notes

- **Main beam stabilizers should be installed between cantilever brackets under worksurfaces, and not in place of the brackets.**
- **A main beam stabilizer and worksurface support kit should be placed directly under a worksurface laden with heavy office equipment (photocopiers, laser printers, fax machines) to provide additional support for the worksurface.**
- **Main beam stability is normally derived from other main beams or mini beams mounted at a 90° angle. Main beam stabilizers may be used for certain conditions, as described in the Product Application Guidelines section.**



Tip **When placed directly below a corner worksurface, a worksurface support kit may interfere with an adjustable keyboard pad (AKP) track or with the AKP's ability to store beneath the worksurface.**

Modesty Panels

There are two types of RACE modesty panels: solid and perforated. Both offer acoustic dampening and visual privacy by closing the space between the bottom of the main beam and the floor. Both styles leave a 3½" (89mm) space above the floor for air circulation.

Note **Each modesty panel fits flush with one side of a main beam. If a more finished appearance is desired, specify modesty panels for both sides.**

Modesty Panels: General Information

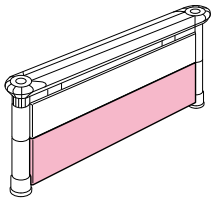
Modesty panels are specified in accordance to the main beam's length:

- 36" (914mm)- to 72" (1829mm)-long modesty panels are one-piece construction:
  - a separately specified attachment kit (RMHK-1) is required for mounting
- 84" (2134mm)- to 120" (3048mm)-long panels are two-piece construction:
  - a separately specified attachment kit (RMHK-2) is required for mounting
  - modesty lengths will match center or off-center upper post placement:
    96" and 120" modesty panels are centered
    84" and 108" modesty panels are off-centered

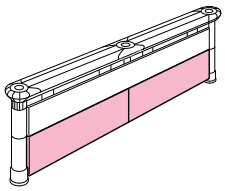
Modesty Panel Details

- Specified per side
- Height (both modesty panel styles): 14½" (368mm)
- Solid modesty panel provides enhanced acoustical barrier
- Perforated modesty panel is typically specified for enhanced airflow and ventilation

Solid Modesty Panel

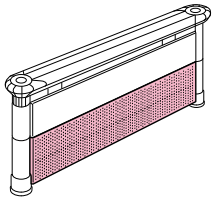


One-Piece

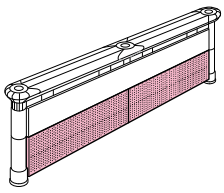


Two-Piece

Perforated Modesty Panel



One-Piece



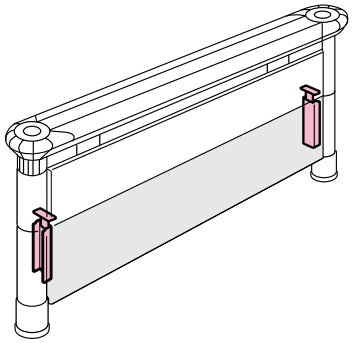
Two-Piece

Tip **When modesty panels are back-to-back, a 2" gap is available for routing cables from floor to beam.**

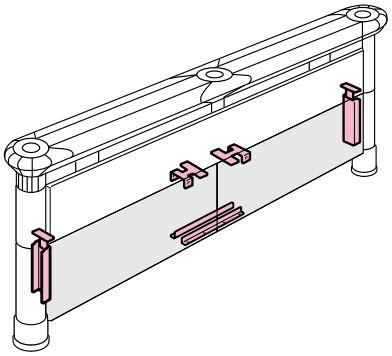
Note **A RMFE-1 floor entry cover can be specified for covering electrical conduit or communication cables in double-sided modesty panel applications. For details, refer to the Power & Cable Management section.**

Modesty Panel Attachment Hardware Kit

- Required for attachment of modesty panel(s) to main beam
- RMHK-1 contains two end connector brackets for attaching one single- or double-sided one-piece modesty panel
- RMHK-2 contains two end connector brackets and two midpoint connector brackets for attaching single- or double-sided two-piece modesty panels



For one-piece modesty panels
36" (914mm) to 72" (1829mm) long



For two-piece modesty panels
84" (2134mm) to 120" (3048mm) long

Mini Beams

The off-modularity feature of the RACE mini beam-to-main beam attachment offers several space-division advantages, including:

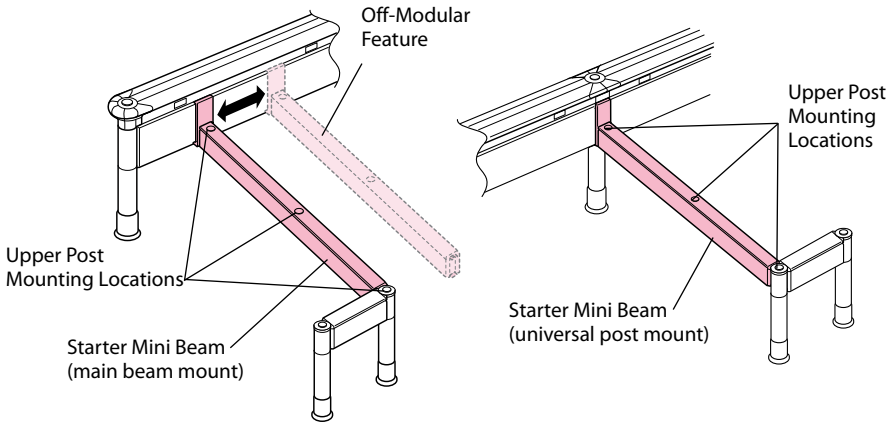
- Easy lateral reconfiguration to allow redefinition of workspace dimensions
- Movement to any position to close gaps between worksurfaces, storage components, freestanding furniture, etc.

The mini beam is available as a "starter" and "add-on" beam. The starter mini beam connects to the main beam in one of two ways: anywhere along the main beam's mounting channel (off-modular capability), or directly to the center of the universal post. The add-on mini beam attaches at 180° (in-line) or 90° to the starter mini beam by connecting to a mini beam single post. Starter mini beams must be supported on one end with a mini beam post; add-on mini beams must be supported on both ends with mini beam posts.

Mini beams do not accommodate electrical components and communication cabling; therefore, mini beams are an economical specification alternative when power and voice/data access is unneeded at various locations within a workspace.

Starter Mini Beam Details

- Designed only for the initial connection to the main beam
- Width: 4" (102mm)
- Height: 4" (102mm); when installed on main beam, 24¼" (616mm)
- Lengths: 60" (1524mm), 72" (1829mm), and 96" (2438mm)
- 72" (1829mm) and 96" (2438mm) lengths have a centered mounting location for mini beam upper posts
- Two attachment methods:
  - starter mini beam-to-main beam horizontal mounting channel
  - starter mini beam-to-universal post



Note **Mini beams do support mini beam worksurfaces and upper structure components, depending on the type of mini beam post specified.**

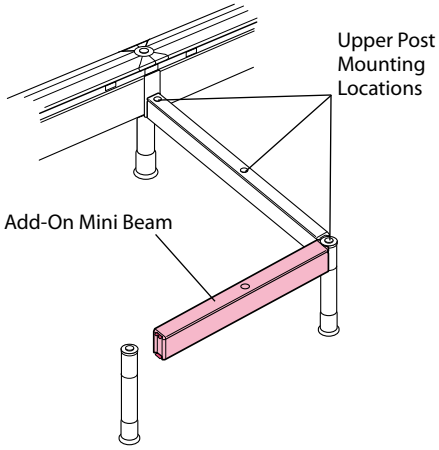
Tip **When upper structure is specified, order upper post for the following locations:**

- **bracket end of starter mini beam**
- **mid-point of 72" (1829mm)- or 96" (2438mm)-long mini beam**
- **mini beam post (single, "L" or "T")**

Mini Beams

Add-On Mini Beam Details

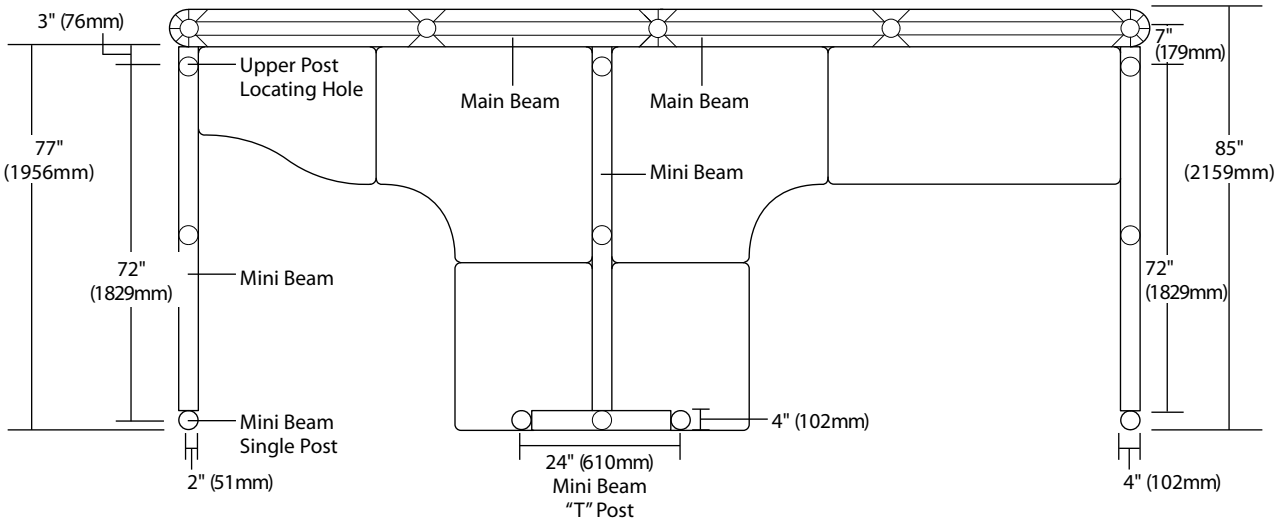
- Provides enclosure to a workstation
- Not intended to support components
- Width: 4" (102mm)
- Height: 4" (102mm); when installed, 24¼" (616mm)
- Lengths: 60" (1524mm), 72" (1829mm), and 96" (2438mm)
- 72" (1829mm) and 96" (2438mm) lengths have a centered mounting location for mini beam upper posts



Tip **For converting from main beam attachment to universal post attachment use Mini Beam/Universal Post Connection kit, see Price List.**

Mini Beam Dimension Factors

Mini beam dimensions are taken from the centerlines of the mini beam post and the upper post locating hole nearest the main beam. Note the 72" (1829mm) dimension of the mini beam depicted on the left side of the illustration below. The overall length from the mini beam/main beam junction to the outside edge of the single post is 77" (1956mm).



Note **For details on dimension planning for mini beam worksurfaces, see Worksurfaces section.**

Mini Beam Posts

Mini beam posts are vertical steel supports for starter and add-on mini beams. The post is 4" (102mm) in diameter, which matches the 4" (102mm) width of the mini beam.

There are three types of mini beam posts: single post, "L" post, and "T" post. Each post supports specific components and/or workstation design applications (see below).

Note **For details on mini beam posts related to specific worksurface support applications, refer to the Worksurfaces section.**

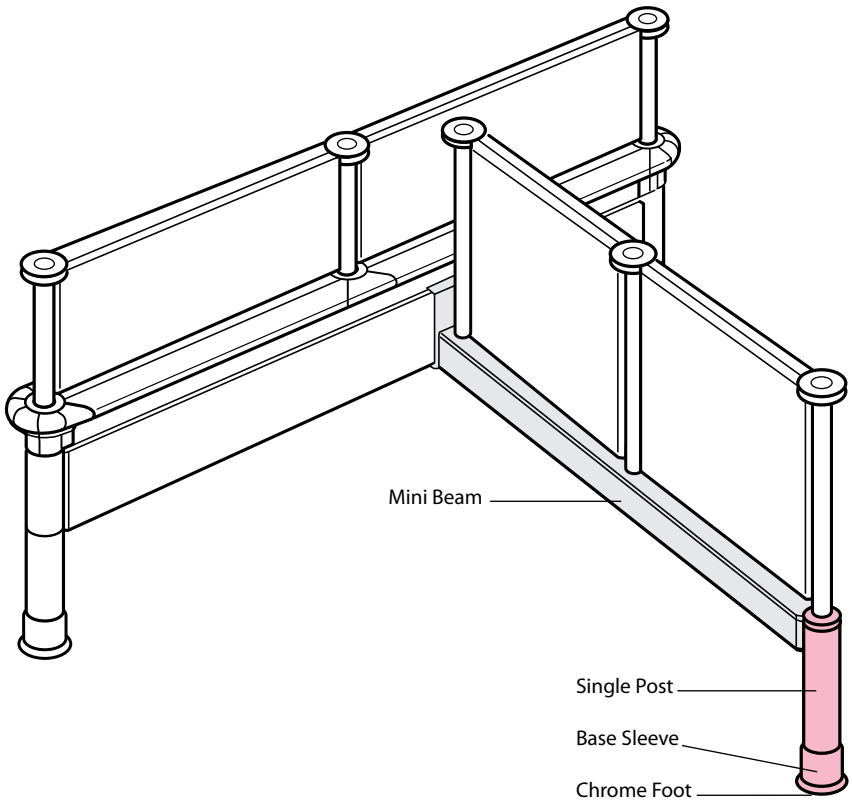
Mini Beam Posts: General Information

The following specifications are common to all types of mini beam posts.

- Height: 24¼" (616mm)
- Diameter of post: 4" (102mm)
- Chrome leveling foot at base of post provides a height adjustment range of 3" (76mm):
  - from 23" (584mm) to 26" (660mm)
  - a base sleeve conceals the adjustment mechanism

Single Post

- Designed to support mini beams with upper structure components — such as mini beam upper posts, rails, and pads — without overhead storage units or worksurfaces (i.e. non-load-bearing applications)
- Provides one mounting location for mini beam upper posts

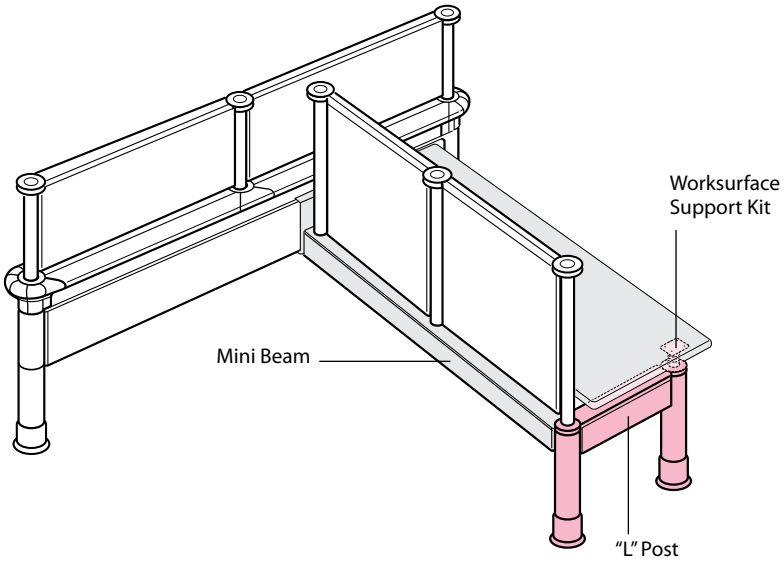


Mini Beam Posts

"L" Post

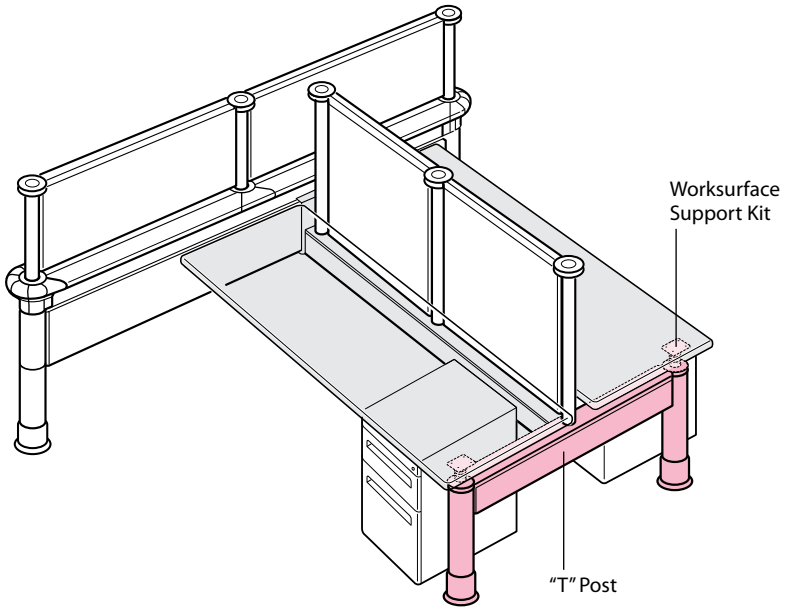
- Designed to support mini beams with worksurfaces and upper structure components (with or without overhead storage units) — on one side only of a mini beam
- Used in combination with a worksurface support kit (shipped with mini beam worksurface)
- Width of beam: 4" (102mm)
- Depth of beam: 18" (457mm) and 24" (610mm) — (center to center of posts)
- Provides one mounting location for mini beam upper posts

Note **For proper specification of "L" or "T" posts, refer to the Worksurfaces section for Mini Beams.**



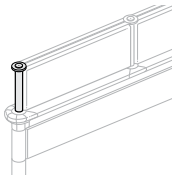
"T" Post

- Designed to support mini beam worksurfaces and upper structure components (with or without overhead storage units) back-to-back — on both sides of a mini beam
- Used in combination with a worksurface support kit (shipped with mini beam worksurface)
- Width of beam: 4" (102mm)
- Depth of beam: 24" (610mm) and 36" (914mm) – (center to center of posts)
- Starter or add-on mini beam attaches to midpoint of the "T" post's beam
- Provides one mounting location for mini beam upper posts

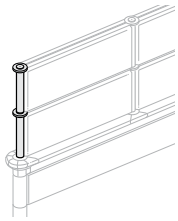


Upper Structure Statement of Line

Upper Posts: Main Beam

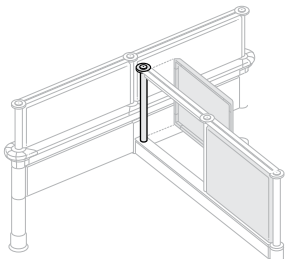


14" (356mm) high;
48" (1219mm) overall height

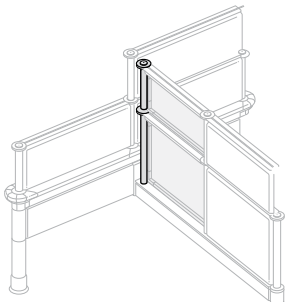


28" (711mm) high;
62" (1575mm) overall height

Upper Posts: Mini Beam

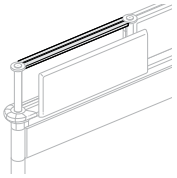


24" (610mm) high;
48" (1219mm) overall height

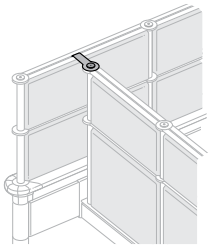


38" (965mm) high;
62" (1575mm) overall height

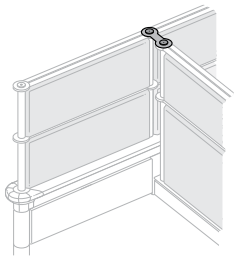
Rails



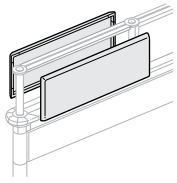
Mini Beam Post-to-Rail Tie Bar



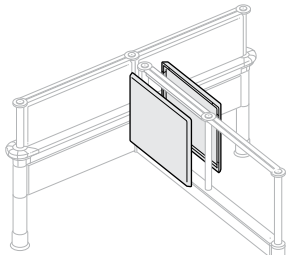
Mini Beam Post-to-Upper Post Tie Bar



Acoustic/Tackable Pads

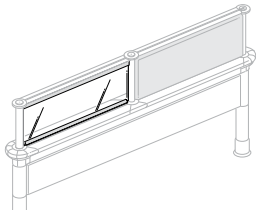


14" (356mm) high



24" (610mm) high — Mini Beams Only

Windows

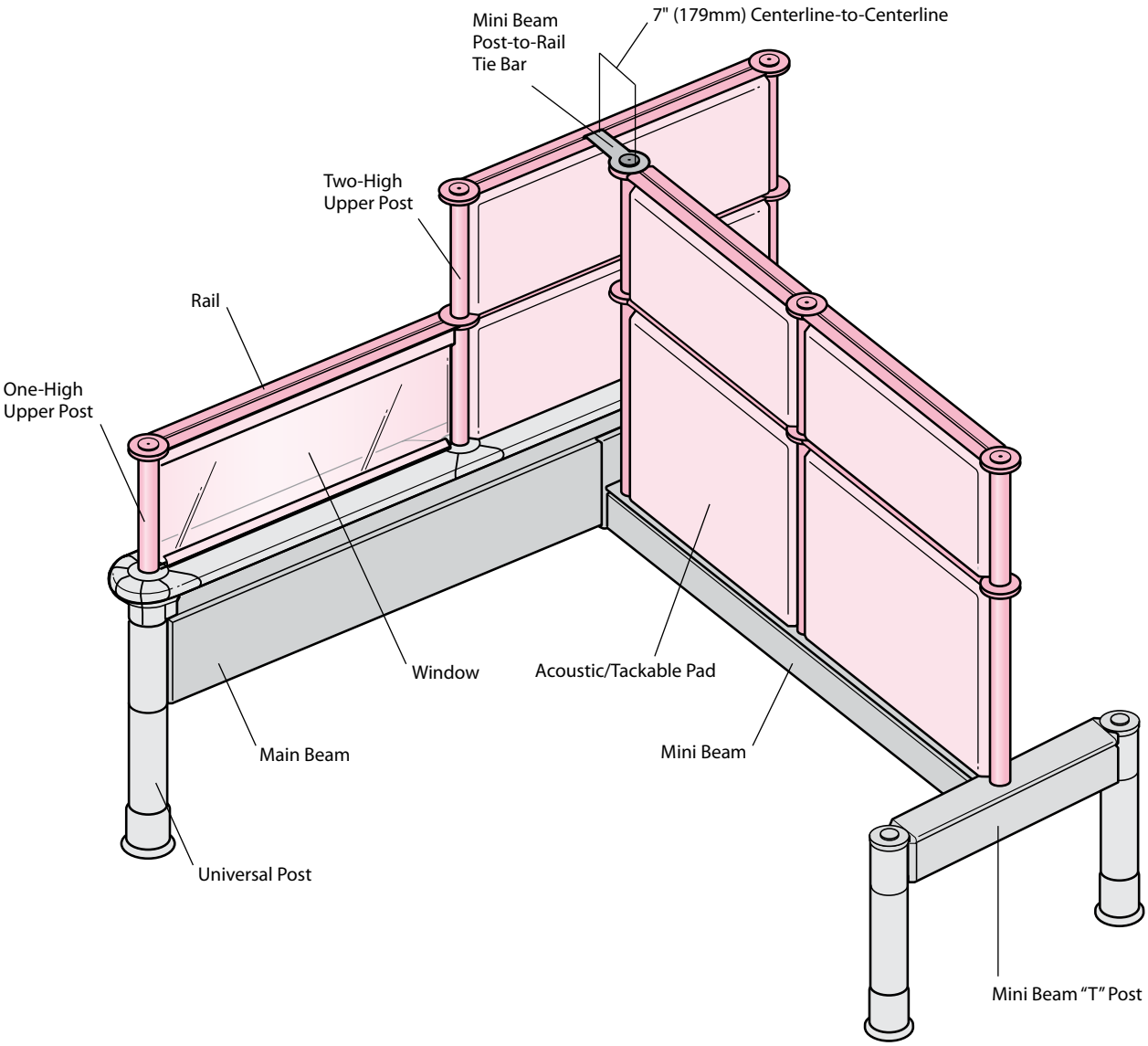


14" (356mm) high

Upper Structure Overview

After RACE main beams and mini beams have been planned, you can add the system's upper structure for privacy and support of a wide variety of RACE components.

Upper posts and rails form the vertical and horizontal framework that offers sturdy support for acoustic/tackable pads, windows, overhead storage components, counter tops, and work tool accessories.



Note **Prior to planning for overhead storage components, counter tops, and work tool accessories, refer to the Product Application Guidelines section for details.**

Upper Posts and Rails

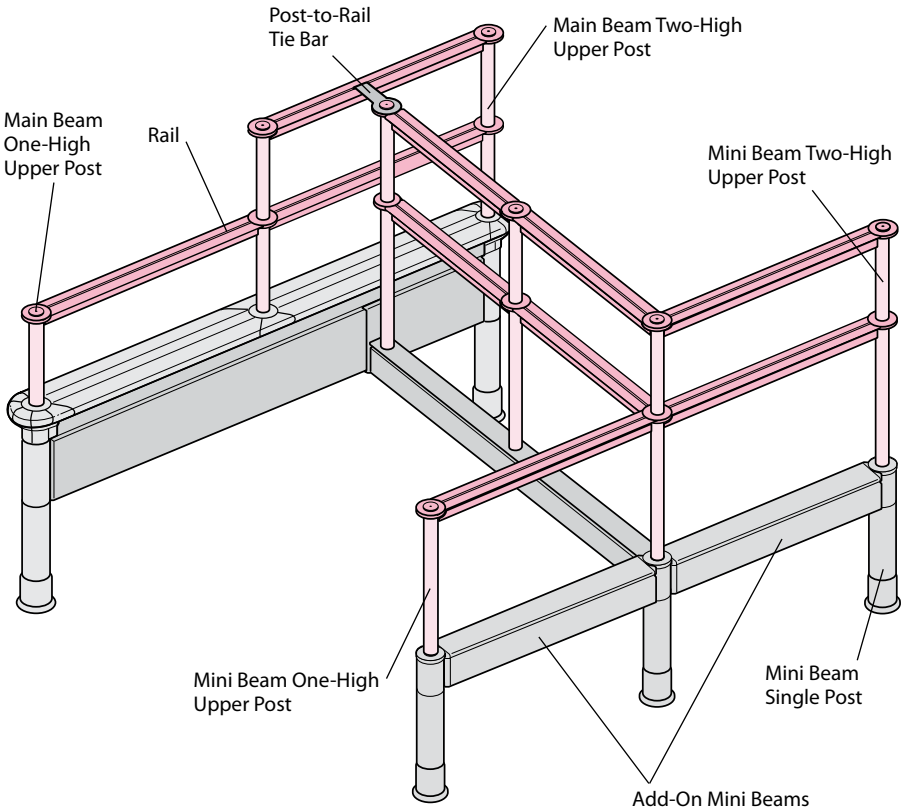
Upper posts form a vertical framework that provides a connection point for horizontal rails. Posts and rails can be reconfigured without altering the beam structure.

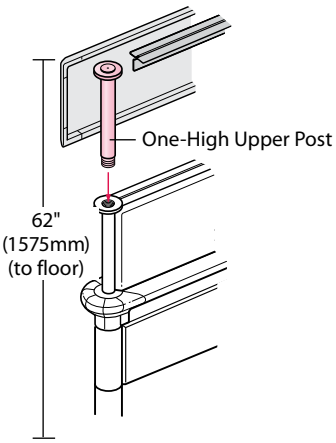
Main Beam Upper Posts

- Height (one-high): 14" (356mm) above beam; 48" (1219mm) above floor
- Height (two-high): 28" (711mm) above beam; 62" (1575mm) above floor
- Diameter: 2" (51mm)
- Thread into two locations:
  - the universal post
  - the center of 72" (1829mm)-, 96" (2438mm)-, and 120" (3048mm)-long main beams
  - the off-center of 84" (2134mm)- and 108" (2743mm)-long main beams

Mini Beam Upper Posts

- Height (one-high): 24" (610mm) above beam; 48" (1219mm) above floor
- Height (two-high): 38" (965mm) above beam; 62" (1575mm) above floor
- Diameter: 2" (51mm)
- Thread into three locations:
  - any mini beam post (Single, "L", or "T")
  - the end of the starter mini beam that attaches to the main beam
  - the center of 72" (1829mm) or 96" (2438mm)-long mini beams





Tip **The threaded design of the upper post lends itself to ease of stackability. Example: A one-high main beam upper post can be easily threaded into an existing one-high post to create 62" (1575mm) standing height privacy.**

Notes

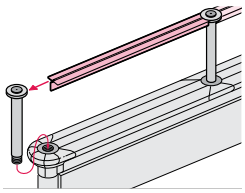
- **The one-high upper post can also be used to support a RACE counter top.**
- **Mini beam post-to-rail and post-to-upper post tie bars enhance the stability of the mini beam upper structure. For details, refer to the Storage Components section.**

Upper Posts and Rails

Rails

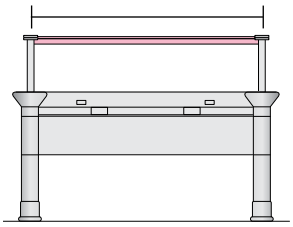
Rails attach to the rings of upper structure posts, forming a horizontal framework that frames pads and windows. Rails also support overhead shelves, storage units, and grid with accessories.

- Rail lengths: correspond to main beam and mini beam lengths:



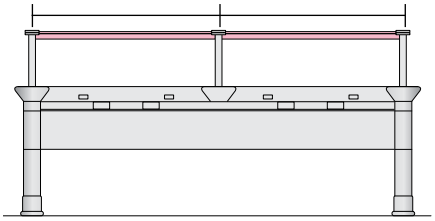
Rail

One-Piece Rail



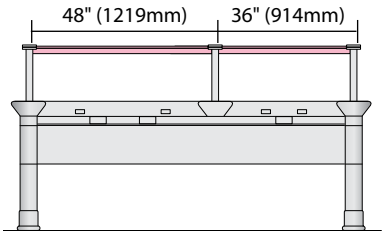
36"-, 48"-, and 60"-long beams

Two-Piece Rails, Equal Lengths

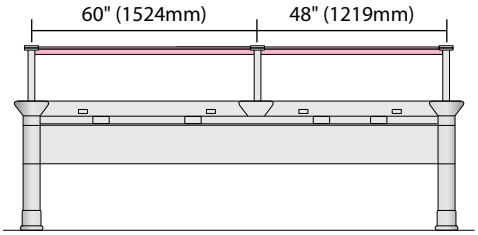


72"-, 96"-, and 120"-long beams

Two-Piece Rails, Different Lengths

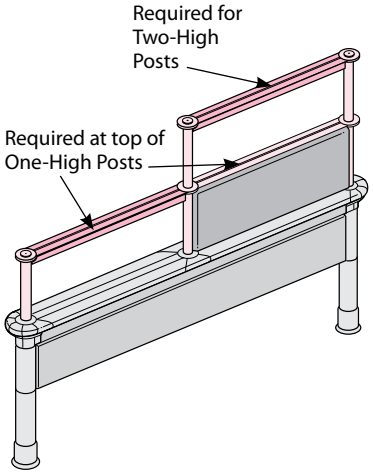


84"-long beam



108"-long beam

- One rail is required at the top of one-high posts
  - if no pad is desired beneath a counter top, no rail is necessary
- Two rails are required for two-high posts:
  - one rail at the top of the post
  - one rail at the horizontal intersection between pads



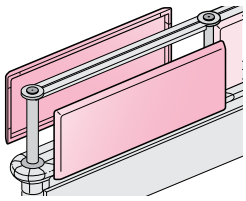
Tip **There are only three rail lengths — 36" (914mm), 48" (1219mm), and 60" (1524mm) used in different combinations — which minimizes the kit of parts on the job site or in warehousing.**

Acoustic/Tackable Pads

RACE acoustic/tackable pads and windows install into the framework of the upper post and rail structure. Acoustic/tackable pads provide both visual and acoustic privacy between workstations and within the overall work environment. Windows allow visual contact between workstations yet provide physical and acoustic separation. Different options are available between the glass and acrylic windows, offering an array of striking design possibilities.

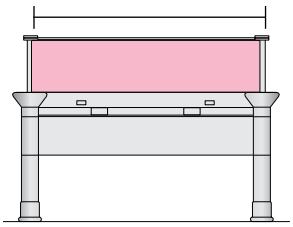
Acoustic/Tackable Pads

- 14" (356mm)-high pad:
  - positioned at a one- and/or two-high main beam application, or
  - positioned at a two-high mini beam application
- 24" (610mm)-high pad:
  - positioned at a one-high mini beam application only
- Each pad set contains two (2) pads for mounting on both sides of the rail
- Widths: correspond to main beam and mini beam lengths:



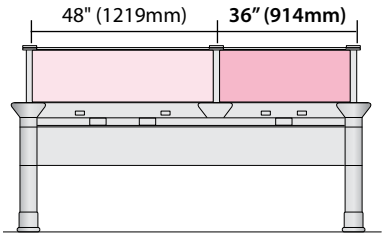
Pad Set

One-Piece Pad Set



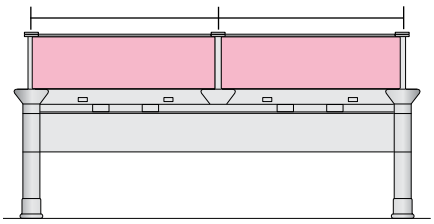
36"-, 48"-, and 60"-long beams

Two-Piece Pad Sets, Different Lengths

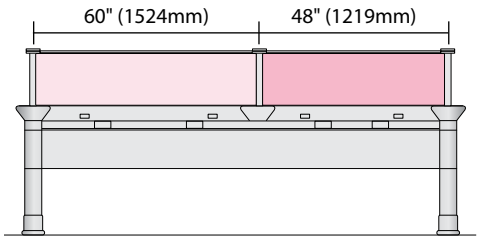


84"-long beam

Two-Piece Pad Sets, Equal Lengths



72"-, 96"-, and 120"-long beams



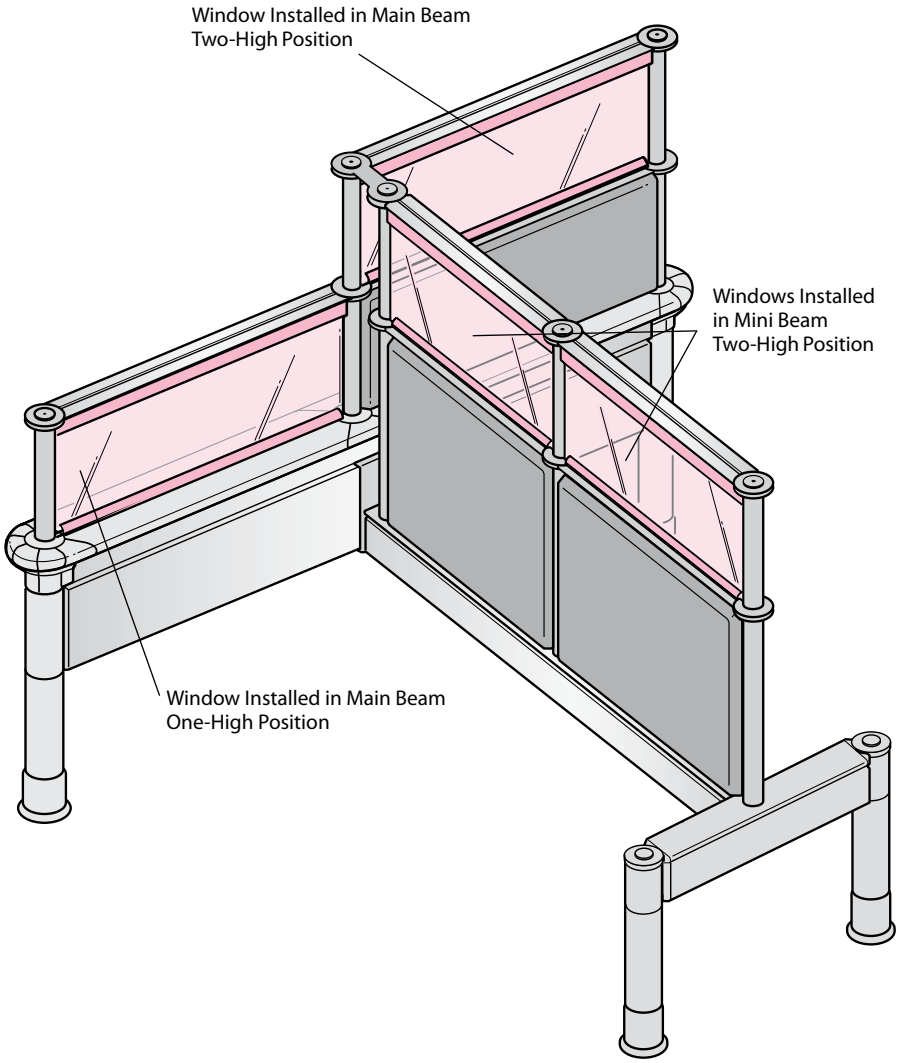
108"-long beam

Tips

- **There are only three lengths of pads and windows — 36" (914mm), 48" (1219mm), and 60" (1524mm) used in different combinations — which minimizes the kit of parts on the job site or in warehousing.**
- **When beams are placed against a solid wall, omitting pads on the wall side will not affect performance.**

Windows

- Height: 14" (356mm)-high:
  - positioned at a one- and/or two-high main beam application, or
  - positioned at a two-high mini beam application
- Widths: correspond to main beam and mini beam lengths:
  - refer to pad dimensions
- Each window is single pane(s) insert



Tip **Glass windows are textured on one side only. Haworth recommends installing the textured side to face the interior of the work-station. Spacers are provided with window kits to allow for the installation of grid and accessories below the window.**

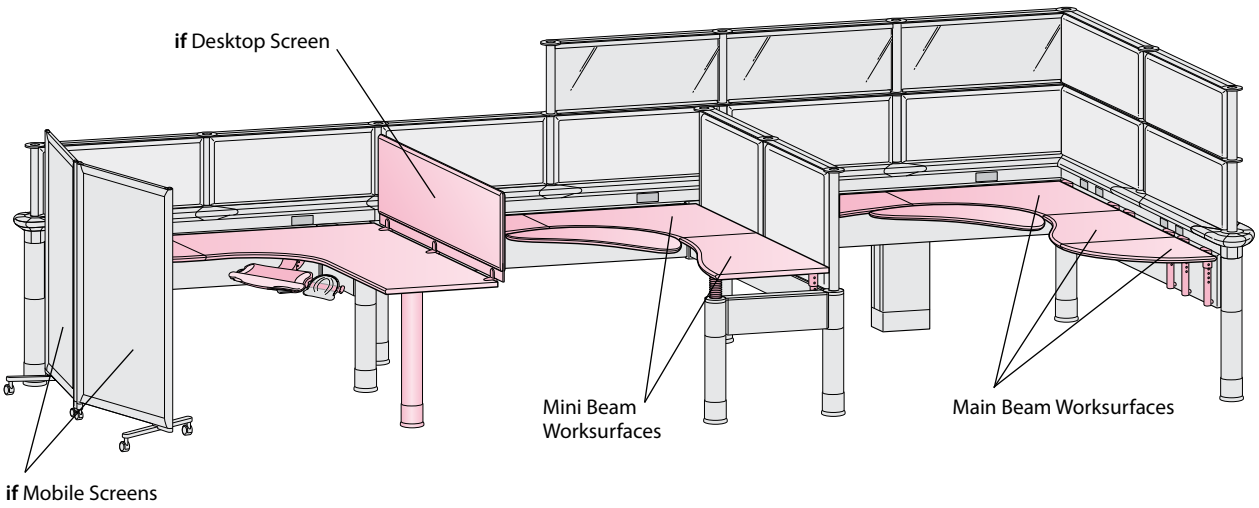
Note **Grid and accessories cannot be mounted on glass windows.**

Worksurfaces Overview

RACE offers a wide variety of worksurface shapes and sizes. They're perfectly suited to meet the productivity demands in any work environment. What's more, the vast product line makes designing workstations a fun, fascinating, and wide-open endeavor.

Main beam worksurfaces are secured to the beam's mounting channel with cantilever brackets, which allows for horizontal off-modularity of the main beam worksurfaces. Mini beam worksurfaces include brackets that clamp onto the mini beam. Adjustable keyboard pads, **if** desktop screens, and counter tops help to enhance ergonomics, privacy, and function in individual workspaces and meeting areas alike.

- **if** freestanding worktops are not dimensionally compatible with RACE worksurfaces

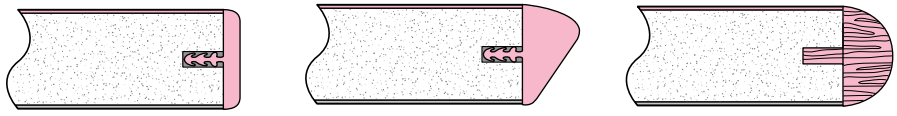


Surface Options

The top surfaces of all main beam and mini beam worksurfaces are available in high-pressure laminate. (Exception: The front worksurface of the split curved wrap-around worksurface has a plastic thermofused covering.) Wood veneer is available on these main beam surfaces: Rectangular, 90° Corner, D-Shaped Convergent, and Rectangular Convergent. Wood veneer is offered on two mini beam worksurfaces: Rectangular and 90° Corner.

Edge Detail Options

RACE worksurfaces are available with three edge detail options: the RACE Standard edge, the Cascade Vinyl edge (solid or translucent), and the RACE Wood Bullnose edge.



RACE Standard | Cascade Vinyl | RACE Wood Bullnose

Worksurface Edge Dimensions

SURFACE/TRIM OPTION	NOMINAL THICKNESS	RADIUS TOP EDGE	RADIUS BOTTOM EDGE
Laminate/RACE Standard	1.225" (31mm)	0.17" (4mm)	1.25" (32mm)
Laminate/Cascade Vinyl	1.225" (31mm)	1.22" (31mm)	0.05" (1.3mm)
Wood/RACE Wood Bullnose	1.225" (31mm)	0.59" (15mm)	0.59" (15mm)

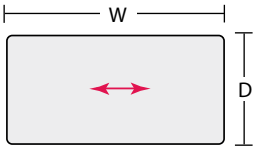
Worksurfaces Overview

EDGE DETAIL AVAILABILITY		STANDARD RACE	CASCADE VINYL	RACE WOOD BULLNOSE
Main Beam Worksurfaces				
Rectangular		●	●	●
Inverse Swell		●	●	
Swell		●	●	
Transitional		●	●	
90° Corner		●		●
120˚ Corner		●	●	
Curved Wrap-Around		●	●	
Split Curved Wrap-Around		●	●	
120˚ Link		●	●	
Curved Wrap-Around Extended		●	●	
Curved Wrap-Around Ext. Trans.		●	●	
Wrap-Around "D"		●	●	
D-Shaped Convergent		●		●
Rectangular Convergent		●		●
Curved Ender		●	●	
Conference End		●	●	
Flush Conference End		●	●	
Curved Link		●	●	
Mini Beam Worksurfaces				
Rectangular		●	●	●
Inverse Swell		●	●	
Swell		●	●	
Transition		●	●	
90° Corner		●		●
Curved Wrap-Around		●	●	
Curved Wrap-Around Extended				
Split Curved Wrap-Around		●	●	
if Tables				
Egg Top			●	
Bend Top			●	
Round Top			●	

Tip **The Cascade edge on laminate worksurfaces is offered on a solid (group I) or translucent (group II) option. Specifying contrasting translucent front edge colors with side/back edge colors will create a solid color break on the translucent appearance from one worksurface to another.**

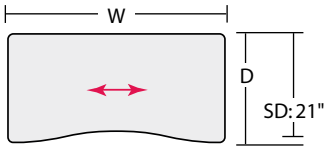
Main Beam Worksurfaces: Statement of Line

Rectangular



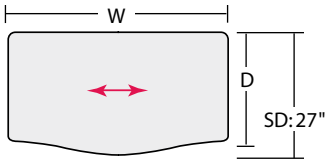
See Price List for width and depth dimension availability.

Inverse Swell



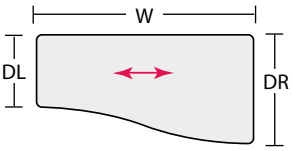
See Price List for width and depth dimension availability.
SD: Swell Depth*

Swell



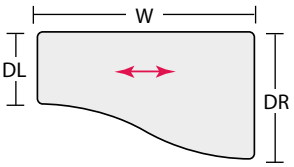
See Price List for width and depth dimension availability.
SD: Swell Depth*

Transition: 16" (406mm) and 24" (610mm) Depths



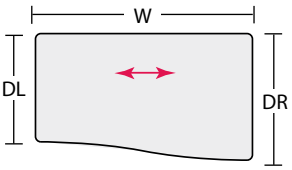
See Price List for width dimension availability.

Transition: 16" (406mm) and 28" (711mm) Depths



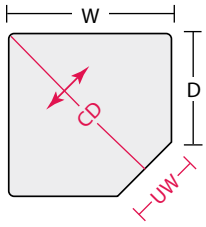
See Price List for width dimension availability.

Transition: 24" (610mm) and 28" (711mm) Depths



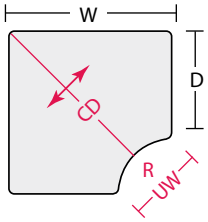
See Price List for width dimension availability.

90° Corner



W	D	CD	UW
36" (914mm)	24" (610mm)	41.83" (1062mm)	16.97" (431mm)
44" (1118mm)		47.07" (1196mm)	28.28" (718mm)
44" (1118mm)	28" (711mm)	50.32" (1278mm)	22.82" (580mm)

90˚ Curved Wrap-Around Corner



W	D	R	CD	UW
36" (914mm)	16" (406mm)	19.81" (503mm)	30.24" (786mm)	28.30" (719mm)
48" (1219mm)		31.81" (808mm)	35.21" (894mm)	45.30" (1151mm)
36" (914mm)	24" (610mm)	11.81" (300mm)	38.24" (971mm)	16.90" (429mm)
44" (1118mm)		19.81" (503mm)	41.55" (1055mm)	28.30" (719mm)
48" (1219mm)	24" (610mm)	22.10" (561mm)	42.50" (1080mm)	33.90" (861mm)
52" (1321mm)		26.10" (663mm)	44.10" (1120mm)	39.60" (1006mm)
56" (1422mm)		30.10" (764mm)	45.80" (1163mm)	45.30" (1151mm)
60" (1524mm)		34.10" (866mm)	47.50" (1206mm)	50.90" (1293mm)
44" (1118mm)	28" (711mm)	15.81" (402mm)	45.55" (1157mm)	22.60" (574mm)

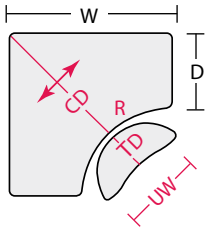
CD: Corner Depth
UW: User Width
DL: Depth Left
DR: Depth Right

Denotes direction of wood veneer and wood grain laminate. Refer to the Price List for availability of finishes on specific worksurfaces.

*** Swell depth is consistent on all width and overall depth dimensions.**

Main Beam Worksurfaces: Statement of Line

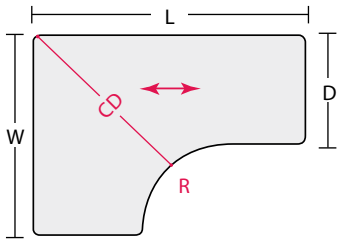
Split Curved Wrap-Around



W	D	CD	UW	TD
36" (914mm)	16" (406mm)	30.90" (785mm)	37.50" (953mm)	48.72" (1237mm)
48" (1219mm)		35.87" (911mm)	41.25" (1048mm)	52.03" (1321mm)

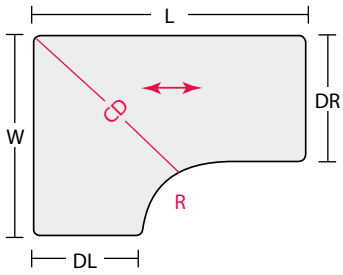
Depth of split surface is 14.50" (368mm)

Curved Wrap-Around Extended



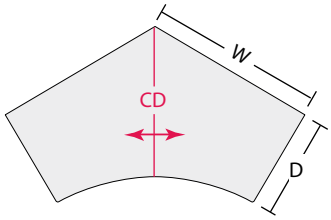
W	D	L	R	CD
36" (914mm)	24" (610mm)	52, 56, 60, 64, 66, 72"	11.50" (292mm)	38.70" (983mm)
	28" (711mm)		7.50" (190mm)	42.70" (1085mm)
44" (1118mm)	24" (610mm)		19.50" (495mm)	42.00" (1067mm)
	28" (711mm)		15.50" (394mm)	46.00" (1168mm)
48" (1219mm)	24" (610mm)		23.50" (597mm)	43.70" (1110mm)
	28" (711mm)		19.50" (495mm)	47.70" (1212mm)

Curved Wrap-Around Extended Transitional



L	D (LEFT)	D (RIGHT)	R	CD
60" (1524mm)	24" (610mm)	28" (711mm)	15.81" (402mm)	42.79" (1087mm)
	28" (711mm)	24" (610mm)	15.81" (402mm)	42.79" (1087mm)
64" (1626mm)	24" (610mm)	28" (711mm)	15.81" (402mm)	42.79" (1087mm)
	28" (711mm)	24" (610mm)	15.81" (402mm)	42.79" (1087mm)
72" (1829mm)	24" (610mm)	28" (711mm)	15.81" (402mm)	42.79" (1087mm)
	28" (711mm)	24" (610mm)	15.81" (402mm)	42.79" (1087mm)

120˚ Corner



W	D	R	CD	UW
24" (610mm)	24" (610mm)	10.10" (256mm)	29.10" (739mm)	13.50" (343mm)
36" (914mm)		30.90" (785mm)	32.30" (820mm)	34.30" (871mm)
48" (1219mm)		51.70" (1313mm)	35.50" (902mm)	55.00" (1397mm)
60" (1524mm)		72.50" (1842mm)	38.70" (983mm)	75.80" (1925mm)
24" (610mm)	28" (711mm)	6.10" (155mm)	33.10" (841mm)	9.50" (241mm)
36" (914mm)		26.90" (683mm)	36.30" (922mm)	30.30" (770mm)
48" (1219mm)		47.70" (1212mm)	39.50" (1003mm)	51.10" (1295mm)
60" (1524mm)		68.50" (1740mm)	42.70" (1084mm)	71.80" (1824mm)

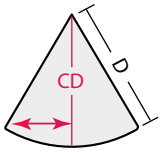
Note **All worksurface widths are 44" (1118mm).**

CD: Corner Depth
TD: Total Depth
UW: User Width
R: Radius
DL: Depth Left
DR: Depth Right

Denotes direction of wood grain laminate. Refer to the Price List for availability of finishes on specific worksurfaces.

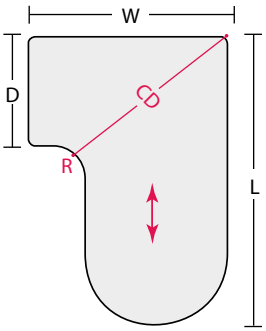
Main Beam Worksurfaces: Statement of Line

120° Link



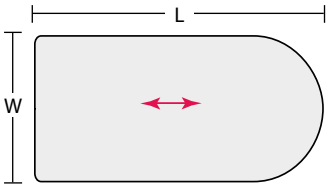
W	D	CD	R
24" (610mm)	26.90" (683mm)	24" (610mm)	24.60" (625mm)
28" (711mm)	30.90" (785mm)	28" (711mm)	28.60" (726mm)

Wrap-Around "D"



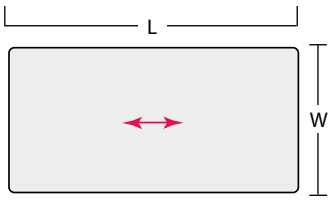
W	D	L	R	CD
44" (1118mm)	16" (406mm)	64" (1626mm)	6.00" (152mm)	37.57" (954mm)
		72" (1829mm)	6.00" (152mm)	37.57" (954mm)
	24" (610mm)	64" (1626mm)	6.00" (152mm)	41.87" (1063mm)
		72" (1829mm)	6.00" (152mm)	41.87" (1063mm)
	28" (711mm)	64" (1626mm)	6.00" (152mm)	44.41" (1128mm)
		72" (1829mm)	6.00" (152mm)	44.41" (1128mm)

D-Shaped Convergent



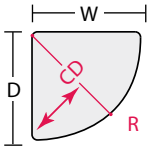
See Price List for width and depth dimension availability.

Rectangular Convergent



See Price List for width and depth dimension availability.

90˚ Curved Ender



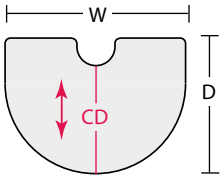
W	D	R	CD
24" (610mm)	24" (610mm)	23.81" (605mm)	23.48" (596mm)
28" (711mm)	28" (711mm)	27.81" (706mm)	27.48" (698mm)

CD: Corner Depth
R: Radius
L: Length

Denotes direction of wood veneer and wood grain laminate. Refer to the Price List for availability of finishes on specific worksurfaces.

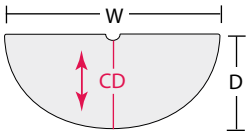
Main Beam Worksurfaces: Statement of Line

Conference End



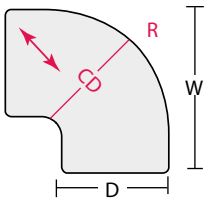
W	D	CD
40" (1016mm)	30" (762mm)	22" (559mm)
56" (1422mm)	30" (762mm)	22" (559mm)

Flush Conference End



W	D	CD
56" (1422mm)	29.90" (759mm)	25.90" (658mm)
64" (1626mm)	33.90" (861mm)	29.90" (759mm)

Curved Link



W	D	R	CD
36" (914mm)	24" (610mm)	28" (711mm)	24" (610mm)
40" (1016mm)	28" (711mm)	32" (819mm)	28" (711mm)

CD: Corner Depth
R: Radius
L: Length

Denotes direction of wood veneer and wood grain laminate. Refer to the Price List for availability of finishes on specific worksurfaces.

Main Beam Worksurfaces: Support

Main beam worksurfaces attach to the beam's mounting channel only. They include all necessary support hardware. The illustrations below show the pre-drilled locations of cantilever brackets, plus other required attachment hardware.

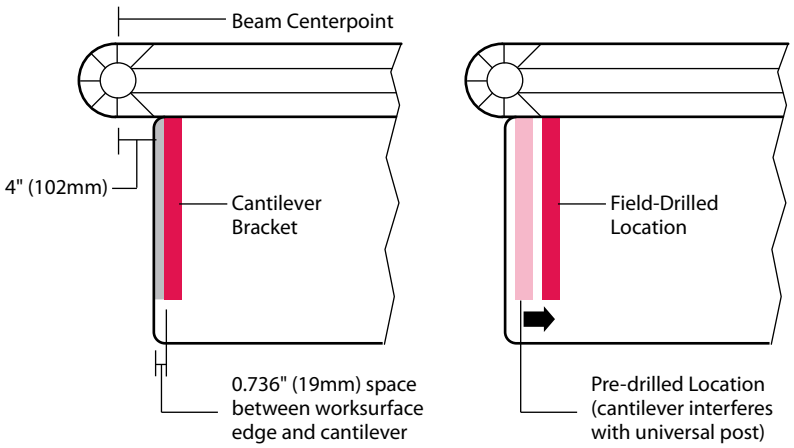
Once installed, main beam worksurfaces can be relocated to any point along the main beam mounting channel; support brackets cannot interfere with a universal post, mini beam, or main beam stabilizer post.

With the exception of the convergent and curved link worksurfaces, all other worksurfaces have a height adjustment range of 6" (152mm); convergent worksurfaces have a 3" (76mm) range. The curved link worksurface height adjustment is contingent upon the height of the worksurface to which it's attached.

Support Bracket Locations

Worksurfaces are pre-drilled for installation of cantilever brackets. The hole locations are based on the outside edge of the worksurface being placed 4" (102mm) to the right or left of the beam's centerpoint. This prevents the cantilever bracket from interfering with the universal post.

If the outside edge of the worksurface is aligned with the beam's centerpoint, the cantilever will interfere with the universal post. The solution is to field-drill new holes in the worksurface and move the cantilever away from the universal post.

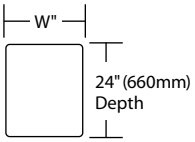


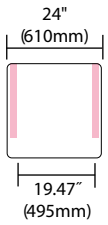
Note **Prior to planning for main beam and mini beam worksurfaces, refer to the Product Application Guidelines section for details on horizontal support and load standards.**

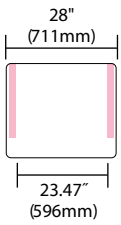
Main Beam Worksurfaces: Support

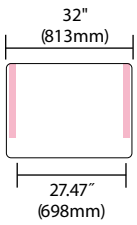
Rectangular, Inverse Swell, Swell, Transition

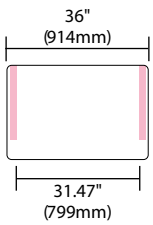
- The number and placement of cantilever brackets are identical on Rectangular, Inverse Swell, Swell, and Transition worksurfaces
- Dimension below each worksurface indicates space between cantilever brackets

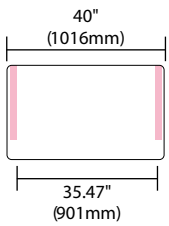


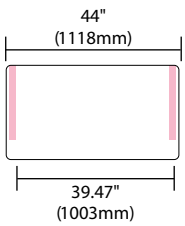


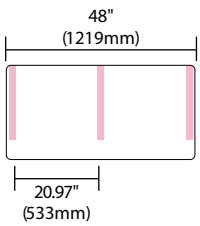


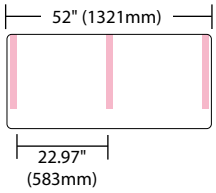


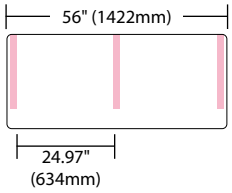


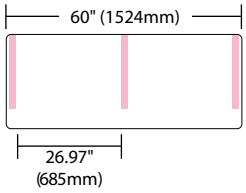


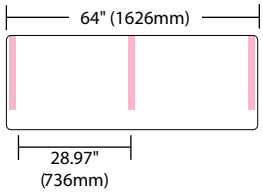


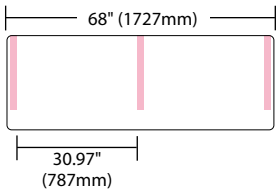


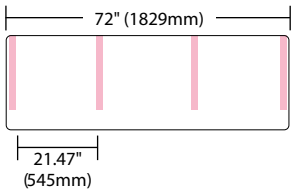


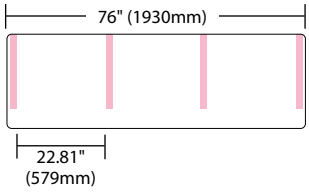


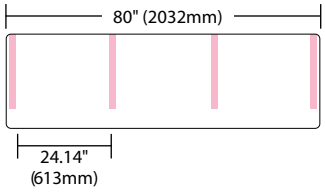








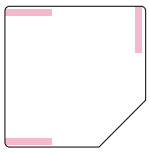




Main Beam Worksurfaces: Support

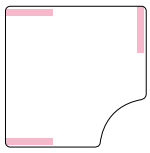
90° Corner

- Used in conjunction with main beam configurations of 90° angle



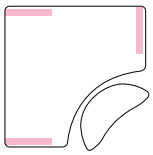
Curved Wrap-Around Corner

- Used in conjunction with main beam configurations of 90° angle
- 36" W x 24" D (shown), 44" W x 24" D, and 44" W x 28" D worksurfaces have cantilevers
- 36" W x 16" D and 48" W x 16" D worksurfaces have cantilevers and convergent support assembly

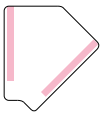


Split Curved Wrap Around

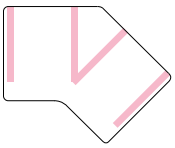
- Used in conjunction with main beam configurations of 90° angle
- Dual worksurface with 1" (25mm) space between the front and rear worksurfaces
- See Price List for other features



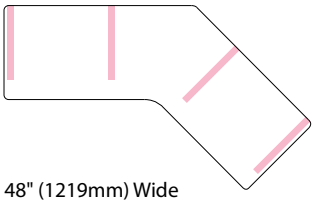
120˚ Corner



16" (406mm) Wide



24" (610mm) Wide

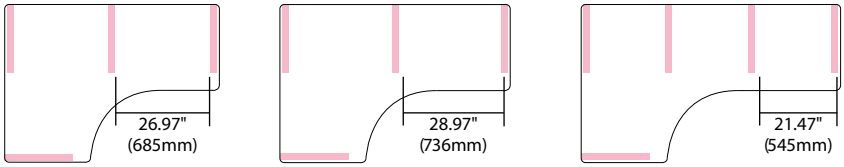


48" (1219mm) Wide

Main Beam Worksurfaces: Support

Curved Wrap-Around Extended and Curved Wrap-Around Extended Transitional

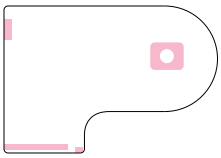
- See Additional Worksurface Support Methods for column-support and fixed pedestal-support options for the extended end



60" (1524mm) Wide | 64" (1626mm) Wide | 72" (1829mm) Wide

Wrap-Around "D"

- Includes cantilevers, support column and support assemblies



D-Shaped Convergent

- Includes support column and support assemblies

Rectangular Convergent

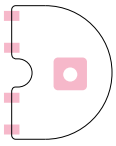
- Includes support column and support assemblies

Curved Ender

- Includes cantilever and front corner support

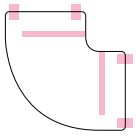
Conference End

- Includes support column and flush mount kits



Curved Link

- Includes cantilevers and flush mount kit

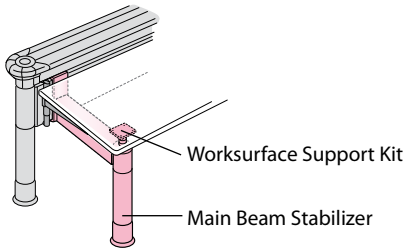


Note **Separately specified worksurface reinforcement channels can provide additional support for laminate or wood convergent and wrap-around 'D' convergent worksurfaces 64" or longer that are heavily loaded and not otherwise supported with worksurface cantilevers, legs or under-worksurface storage. Worksurface reinforcement channels can also provide additional support to 64" or longer curved wrap-around extended and extended transitional worksurfaces used as convergents. See Price List for ordering details for the worksurface reinforcement channel.**

Main Beam Worksurfaces: Additional Worksurface Support Methods

Worksurface Support Kit

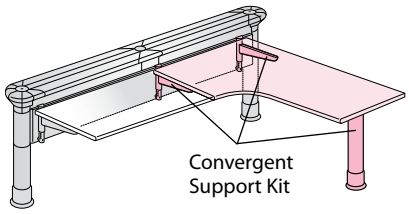
The worksurface support kit is a separately specified component that threads into the top of the main beam stabilizer post. The kit supports a worksurface mounted directly above a main beam stabilizer.



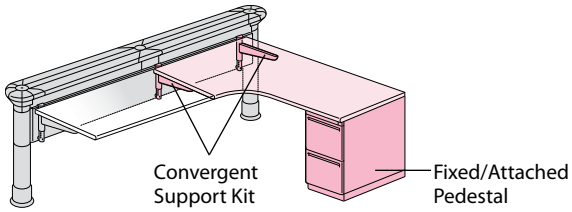
Convergent Support Kits

The convergent support kits are used with curved wrap-around extended top only and curved wrap-around extended transitional top only. Kits are also available to convert curved wrap-around extended and curved wrap-around extended transitional worksurfaces to convergent use. The kits feature:

- One support column, one convergent support bracket, and one main beam cantilever bracket **or**
- One convergent support bracket and one main beam cantilever bracket (for use only with a fixed/attached pedestal supporting the opposite end of the worksurface)



Convergent Support Kit with Column



Convergent Support Kit used with Fixed/Attached Pedestal

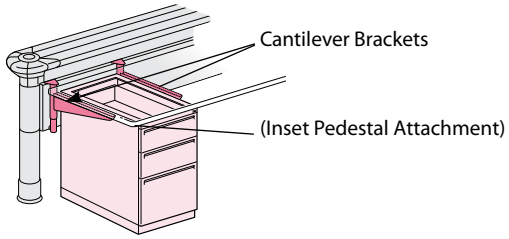
Main Beam Worksurfaces: Additional Worksurface Support Methods

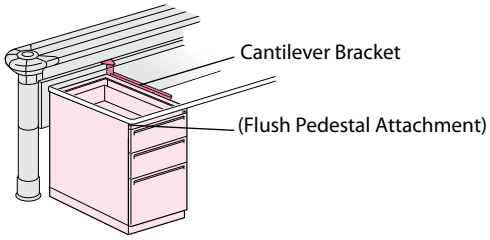
Pedestals and Lateral Files

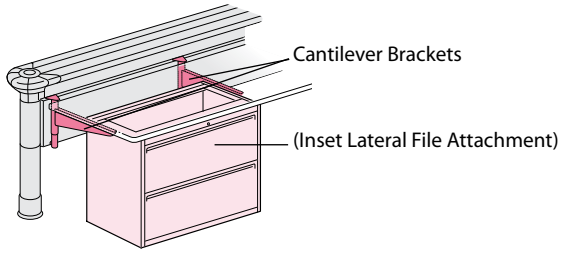
Standard and X Series pedestals — and 950 Series and X Series lateral files — are not designed to replace cantilever brackets for worksurface support.

They provide additional support, especially for heavy worksurface loads.

- When pedestals are inset from the worksurface edge, cantilever brackets must be installed on both sides of the pedestal case.
- With flush-mounted pedestals, one cantilever bracket must be installed against the inside edge of the pedestal case.
- When credenza lateral files are attached to worksurface, the must be placed within worksurface cantilevers.
- Credenza lateral files cannot be flush mounted.







Main Beam Worksurfaces: Pedestal and Lateral File Guidelines

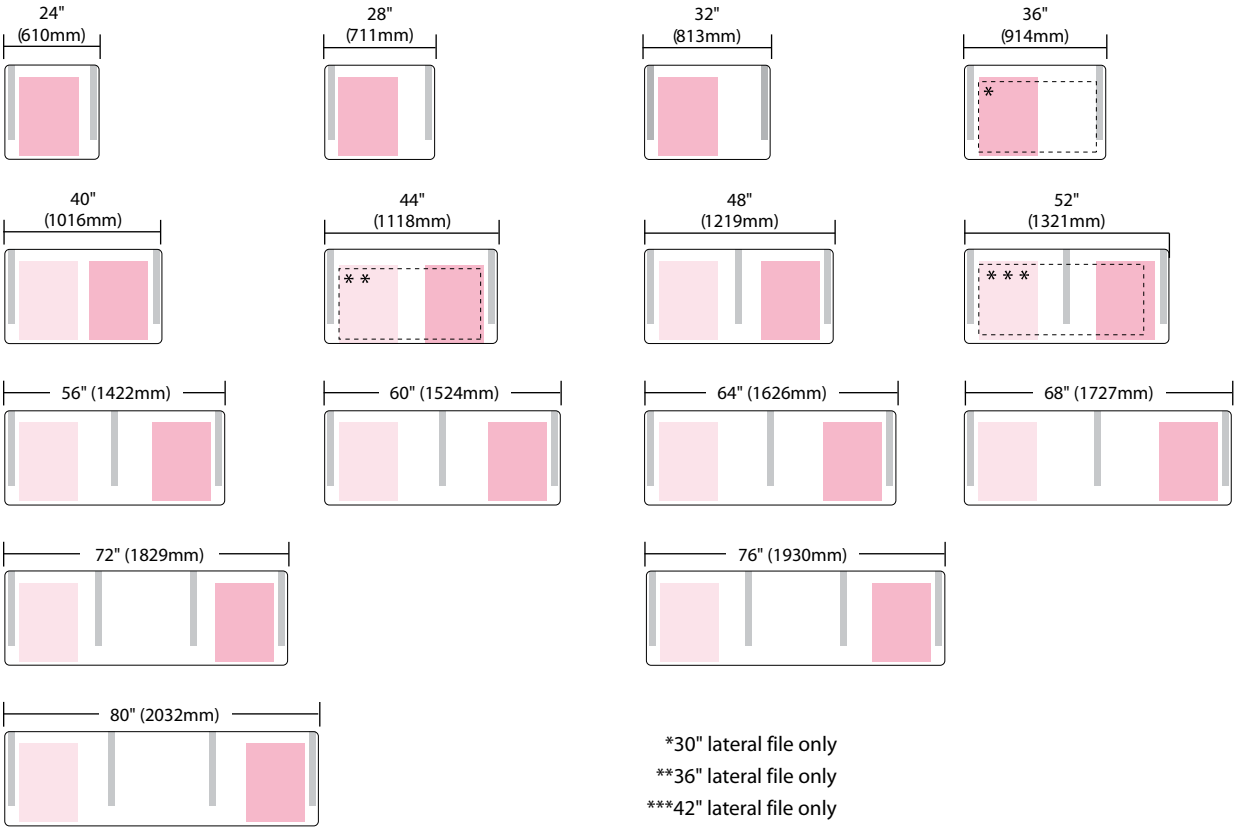
Rectangular, 135° Corner, and Curved Wrap-Around Extended worksurfaces accept suspended pedestals. Rectangular worksurfaces that are 44" (1118mm) wide and greater are pre-drilled for pedestals. Specify X Series pedestals with the Cascade vinyl worksurface edge option; specify Standard pedestals with the Standard worksurface edge. Worksurfaces will accept same- or lesser-depth pedestal.

Pedestal Locations

Single worksurfaces are designed to accept one suspended pedestal only. The illustrations below show the correct locations for 20" (508mm)-deep standard suspended pedestals on 24" (610mm)-deep worksurfaces. Standard pedestals are also available 24" (610mm) deep. X Series pedestals are 18" (457mm) and 24" (610mm) deep.

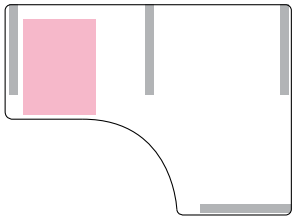
Attached lateral files can be installed underneath rectangular main beam worksurfaces beginning at the 36" (914mm) width. The center cantilever bracket will need to be removed when installing lateral files on worksurfaces 48" (1219mm) and wider.

Rectangular

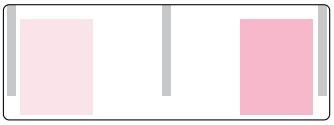


*30" lateral file only
**36" lateral file only
***42" lateral file only

Curved Wrap-Around Extended



Curved Wrap-Around Extended Transitional



Notes

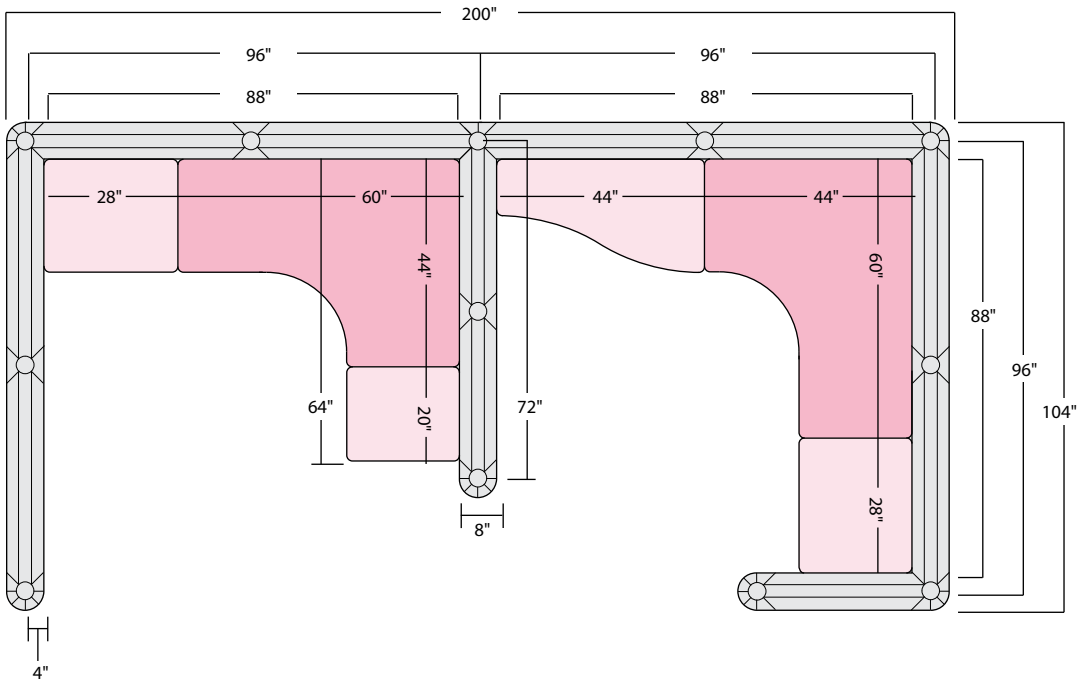
- **Prior to planning for pedestal attachment to main beam worksurfaces, refer to the Product Application Guidelines section for details on horizontal support and load standards.**
- **For interior clearances, refer to Main Beam Worksurface Support section.**

Main Beam Worksurfaces: Dimension Planning

Worksurface dimensions are actual. Plan for the outside measurements of the worksurfaces using dimensions as published in the Price List section.

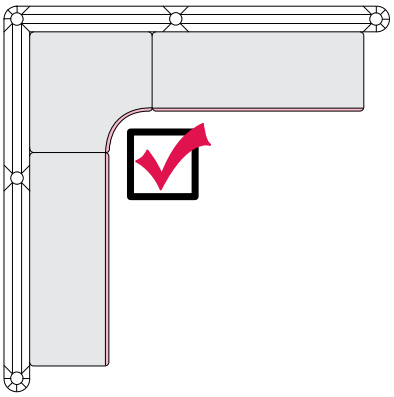
This illustration shows how to determine the available interior clearance for main beam worksurfaces within a configuration of main beams.

- In this example, the overall run of two (2) 96" (2438mm)-long main beams is 200" (5080mm): overall centerpoint-to-centerpoint main beam lengths (96") plus 4" (102mm) on each main beam end:
  - 96" + 96" + 4" + 4" = 200"
- In all cases, the available interior clearance for worksurfaces is determined by the main beam centerpoint-to-centerpoint distance minus 4" for each main beam intersection or beam end. In this example:
  - 96"-long beam: 96" – 4" – 4" = 88" interior clearance
  - 72"-long beam: 72" – 4" – 4" = 64" interior clearance

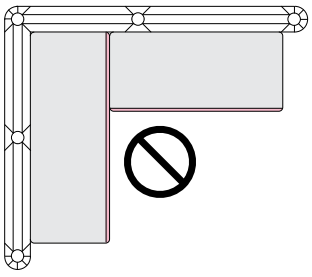


Cascade Worksurface Edge Planning Guideline

Edges of worksurfaces specified with the Cascade Vinyl edge option should not be placed perpendicular to each other. The two edge profiles do not form a flush fit.



Recommended



Not Recommended

Main Beam Worksurfaces: Application Examples

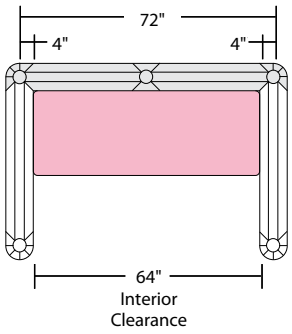
The workstation application examples in this section show you how to apply dimension planning fundamentals in a variety of main beam configurations. Examples 1–2 reinforce the basic fundamentals explained in Main Beam Worksurface Dimension Planning. Examples 3–13 feature different types of worksurface shapes and special planning guidelines that apply to them.

Application Example #1

Interior clearance (for components) is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for each 90° main beam intersection.

- (72" – 4") – 4" = 64" interior clearance

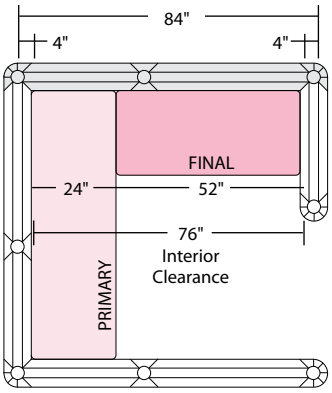
Illustration shows 64"-wide rectangular worksurface.



Application Example #2

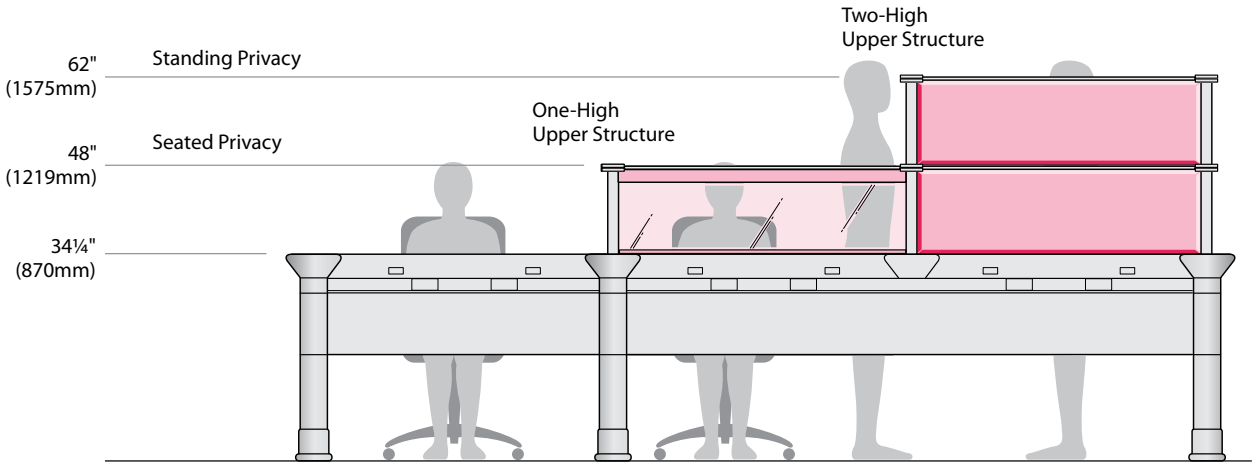
1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for each 90° main beam intersection.
   - (84" – 4") – 4" = 76" interior clearance

2) Subtract depth of primary worksurface from interior clearance.
   - 76" – 24"-deep primary worksurface = 52"-wide final worksurface



Upper Structure Privacy Factors

When specified with acoustic/tackable pads, the upper structure provides two levels of privacy: visual privacy when seated, and visual and acoustic privacy when standing. Refer to the illustration below for overall heights corresponding to one- and two-high upper structure applications.



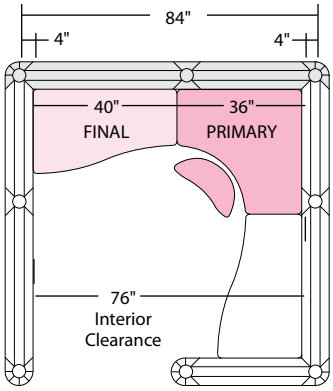
Notes

- **Upper structures of 76" (1930mm) overall height (three-high level) will not support overhead shelves or storage units at the topmost 14" (356mm)-high level.**
- **For details on vertical planning with overhead shelves and storage units, work tool accessories, and desktop lighting, refer to the Product Application Guidelines section.**

Main Beam Worksurfaces: Application Examples

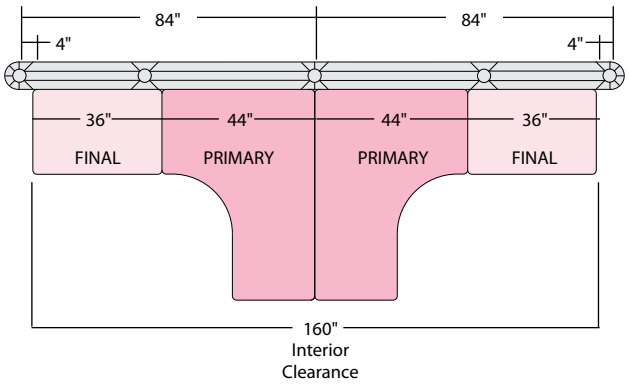
Application Example #3: Corner Worksurfaces

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for each 90° main beam intersection.
   - (84" – 4") - 4" = 76" interior clearance
2) Subtract depth of primary worksurface from interior clearance.
   - 76" – 36" primary worksurface = 40"-wide final worksurface



Application Example #4

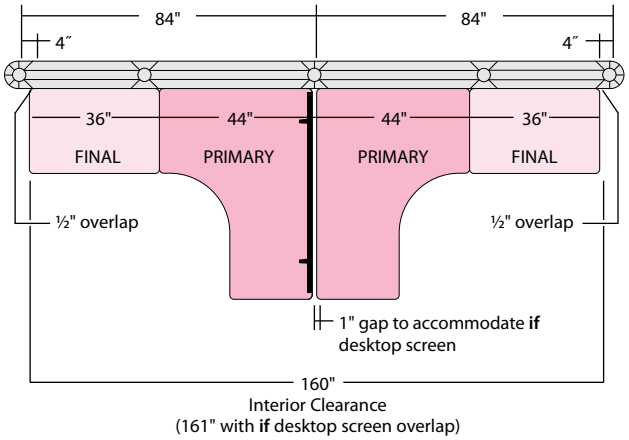
1) Interior clearance is determined by the centerpoint-to-centerpoint main beam lengths minus 4" (102mm) for each main beam end.
   - [(84" x 2) – 4"] – 4" = 160" interior clearance
2) Determine usable space for each office.
   - 160" ÷ 2 = 80" per office
3) Determine worksurface widths.
   - 80" – 44" primary worksurface = 36"-wide final worksurface



Main Beam Worksurfaces: Application Examples

Application Example #5: **if** Desktop Screens

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam lengths minus 4" (102mm) for each main beam end.
   - [(84" x 2) – 4"] – 4" = 160" interior clearance
2) Determine usable space for each office.
   - 160" ÷ 2 = 80" per office
3) Determine worksurface widths.
   - 80" – 44" primary worksurface = 36"-wide final worksurface
4) Add in 1" width for desktop screen planning.
   - (80" x 2") + 1" = 161"



Note **The 1" (25mm) dimensional planning for if desktop screens may affect the perpendicular relationship of worksurfaces.**

Main Beam Worksurfaces: Application Examples

Application Example #6: 120˚ Corners

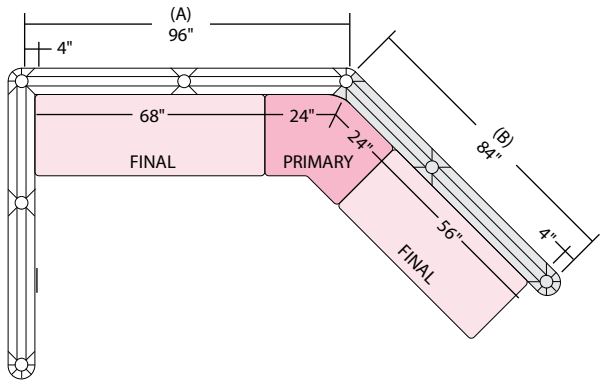
Due to the dimensioning nature of 120˚ corner widths (16", 24", and 48"), the beam end dimension of 4" (102mm) does not need to be subtracted from the beam length (on which the corner is installed).

"A" Dimensioning

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for one main beam end.
   - 96" – 4" = 92" interior clearance
2) Subtract width of corner primary worksurface.
   - 92" – 24" primary worksurface = 68"-wide final worksurface

"B" Dimensioning

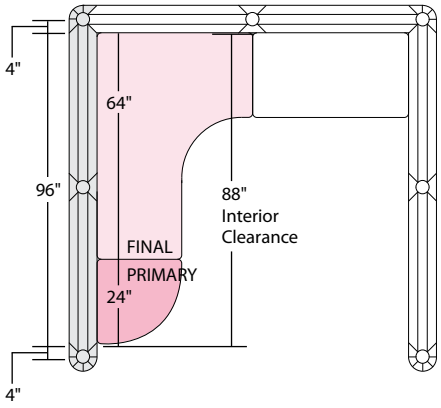
1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for one main beam end.
   - 84" – 4" = 80" interior clearance
2) Subtract width of corner primary worksurface.
   - 80" – 24" primary worksurface = 56"-wide final worksurface



Main Beam Worksurfaces: Application Examples

Application Example #7: Curved Enders

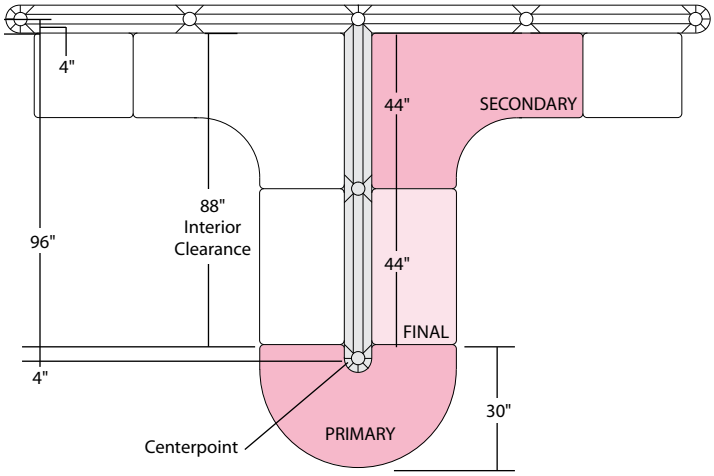
1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for 90° main beam intersection and minus 4" (102mm) for one main beam end.
   - (96" – 4") – 4" = 88" interior clearance
2) Subtract width of primary worksurface from interior clearance.
   - 88" – 24" primary worksurface = 64"-wide final worksurface



Application Example #8: Conference Ends

When planning for Conference Ends, start at the centerpoint of the main beam end minus 4" (102mm) into the workstation.

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for one 90° main beam intersection and minus 4" (102mm) for the Conference End primary worksurface.
   - (96" – 4") – 4" primary Conference End worksurface = 88" interior clearance
2) Subtract depth of secondary worksurface from interior clearance.
   - 88" – 44"-deep secondary worksurface = 44"-wide final worksurface

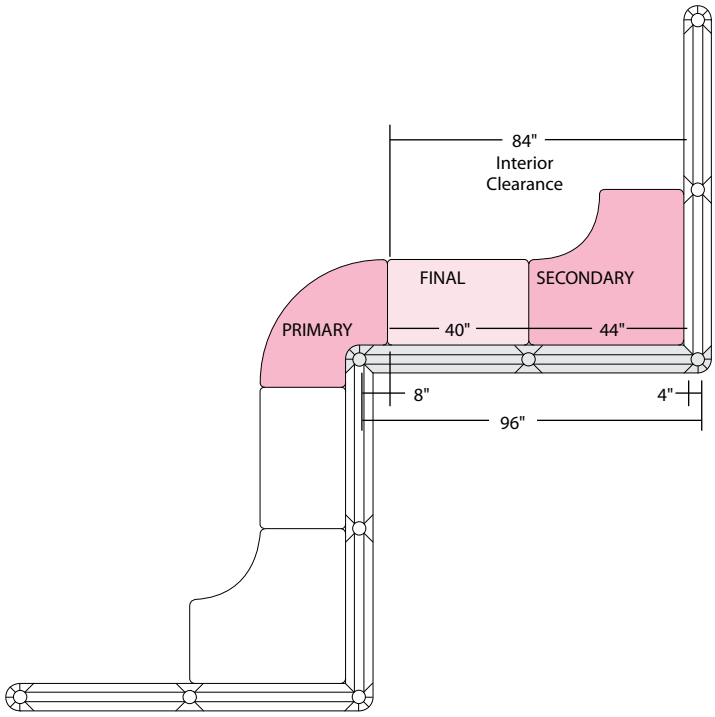


Main Beam Worksurfaces: Application Examples

Application Example #9: Curved Links

When planning for Curved Links, start at the centerpoint of the main beam ends that support the Curved Link minus 8" (203mm) into the adjoining workstations.

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for one 90° main beam intersection and minus 8" (203mm) for the Curved Link primary worksurface.
   - (96" – 4") – 8" primary Curved Link worksurface = 84" interior clearance
2) Subtract depth of secondary worksurface from interior clearance.
   - 84" – 44" secondary worksurface = 40"-wide final worksurface



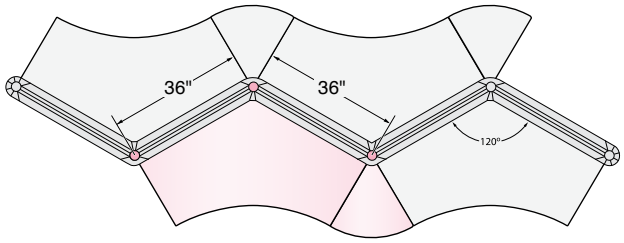
Main Beam Worksurfaces: Application Examples

Application Example #10: 120° Corners and 120° Links

Due to the dimensioning nature of 120° corner widths (24", 36", 48", and 60"), the beam end dimension of 4" (102mm) does not need to be subtracted from the beam length (on which the 120° Corner is installed).

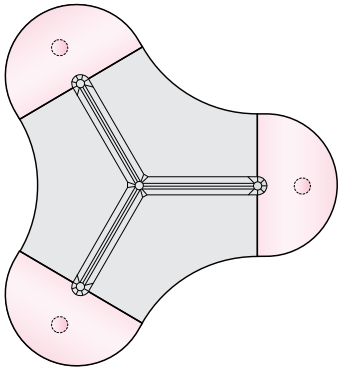
The 120° Link is applied into the open conditions made by the end edges of the 120° Corners. This illustration shows the matching widths of the Main Beam and 120° Corner, and how the 120° Corner end edges line up to the centerpoint of the Main Beam end.

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length.
   - 36" Main Beam = 36" interior clearance
2) 120° Link fits into the open conditions, which line up with the centerpoint of the Main Beam end.



Application Example #11: Flush Conference Ends

When planning for Flush Conference Ends, start at the centerpoint of the main beam end.



Note **The Flush Conference End differs from the Conference End.**

Main Beam Worksurfaces: Application Examples

Application Example #12: 120° Corners

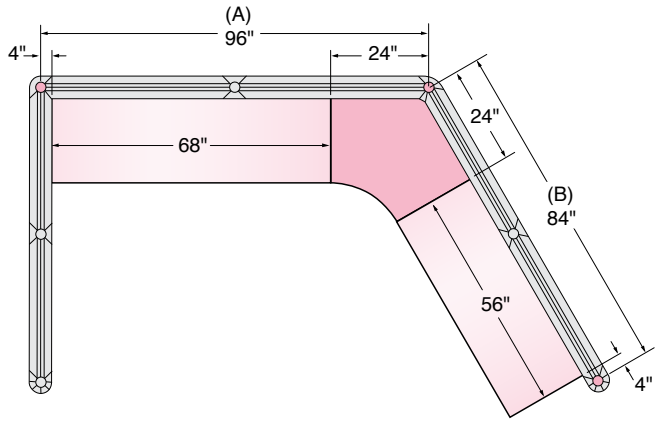
Due to the dimensioning nature of 120° corner widths (24", 36", 48", and 60"), the beam end dimension of 4" (102mm) does not need to be subtracted from the beam length (on which the 120° Corner is installed).

"A" Dimensioning

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for one main beam end.
   - 96" – 4" = 92" interior clearance
2) Subtract width of 120° Corner primary worksurface.
   - 92" – 24" primary worksurface = 68"-wide final worksurface

"B" Dimensioning

1) Interior clearance is determined by the centerpoint-to-centerpoint main beam length minus 4" (102mm) for one main beam end.
   - 84" – 4" = 80" interior clearance
2) Subtract width of 120° Corner primary worksurface.
   - 80" – 24" primary worksurface = 56"-wide final worksurface

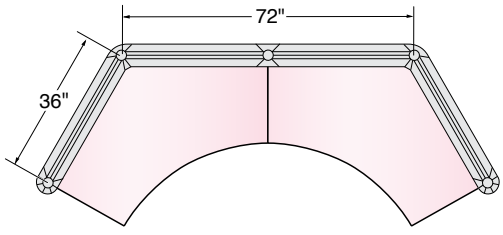


Application Example #13: 120° Corners

Due to the dimensioning nature of 120° corner widths (24", 36", 48", and 60"), the beam end dimension of 4" (102mm) does not need to be subtracted from the beam length (on which the 120° Corner is installed).

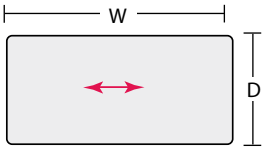
Interior clearance is determined by the centerpoint-to-centerpoint main beam length.

- 48" Main Beam = 48" interior clearance =(2) 48"-wide 120° corners



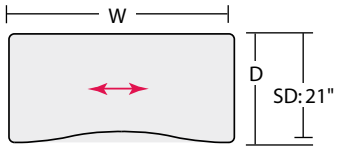
Mini Beam Worksurfaces: Statement of Line

Rectangular



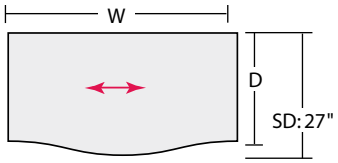
See Price List for width and depth dimension availability.

Inverse Swell



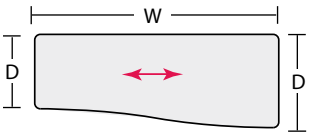
See Price List for width and depth dimension availability.
SD: Swell Depth*

Swell



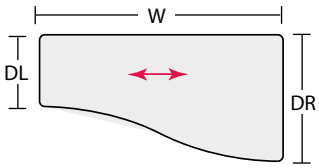
See Price List for width and depth dimension availability.
SD: Swell Depth*

Transition: 16" (406mm) and 24" (610mm) Depths



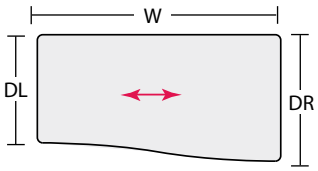
See Price List for width dimension availability.

Transition: 16" (406mm) and 28" (711mm) Depths



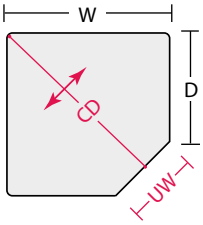
See Price List for width dimension availability.

Transition: 24" (610mm) and 28" (711mm) Depths



See Price List for width dimension availability.

90° Corner



W	D	CD	UW
36" (914mm)	24" (610mm)	41.83" (1062mm)	16.97" (431mm)
44" (1118mm)		47.07" (1196mm)	28.28" (718mm)
44" (1118mm)	28" (711mm)	50.32" (1278mm)	22.82" (580mm)

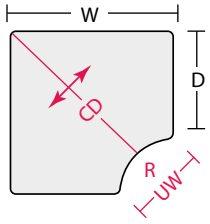
CD: Corner Depth
UW: User Width
DL: Depth Left
DR: Depth Right

Denotes direction of wood veneer and wood grain laminate. Refer to the Price List for availability of finishes on specific worksurfaces.

*** Swell depth is consistent on all width and overall depth dimensions.**

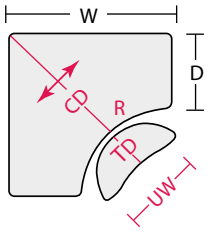
Mini Beam Worksurfaces: Statement of Line

Curved Wrap-Around Corner



W	D	R	CD	UW
36" (914mm)	16" (406mm)	19.81" (503mm)	30.24" (786mm)	28.30" (719mm)
48" (1219mm)		31.81" (808mm)	35.21" (894mm)	45.30" (1151mm)
36" (914mm)	24" (610mm)	11.81" (300mm)	38.24" (971mm)	16.90" (429mm)
44" (1118mm)		19.81" (503mm)	41.55" (1055mm)	28.30" (719mm)
44" (1118mm)	28" (711mm)	15.81" (402mm)	45.55" (1157mm)	22.60" (574mm)

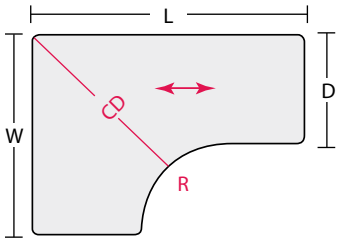
Split Curved Wrap-Around



W	D	CD	UW	TD
36" (914mm)	16" (406mm)	30.90" (785mm)	37.50" (953mm)	48.72" (1237mm)
48" (1219mm)		35.87" (911mm)	41.25" (1048mm)	52.03" (1321mm)

Depth of split surface is 14.50" (368mm)

Curved Wrap-Around Extended



W	D	L	R	CD
36" (914mm)	24" (610mm)	66" (1676mm)	11.50" (292mm)	38.70" (983mm)
	28" (711mm)		7.50" (190mm)	42.70" (1085mm)
44" (1118mm)	24" (610mm)	66" (1676mm)	19.50" (495mm)	42.00" (1067mm)
	28" (711mm)		15.50" (394mm)	46.00" (1168mm)
48" (1219mm)	24" (610mm)	66" (1676mm)	23.50" (597mm)	43.70" (1110mm)
	28" (711mm)		19.50" (495mm)	47.70" (1212mm)

CD: Corner Depth
TD: Total Depth
UW: User Width
R: Radius

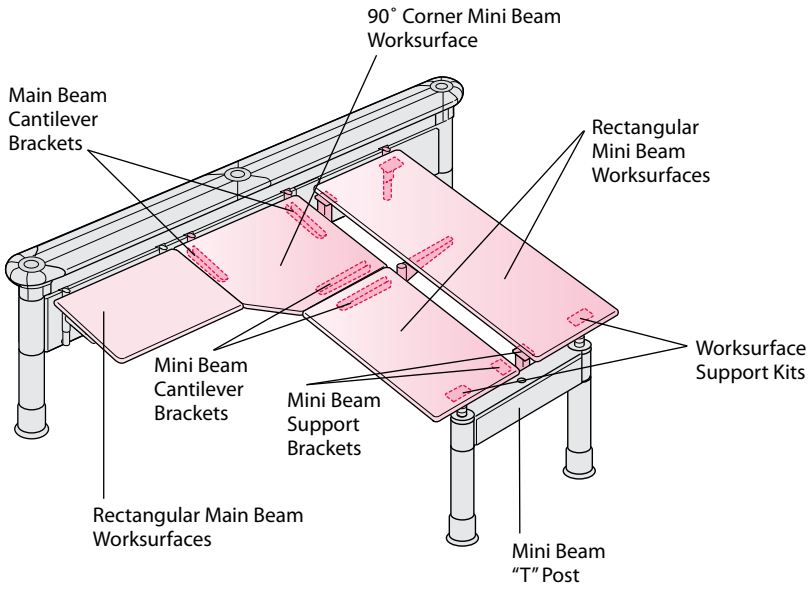
↔ Denotes direction of wood grain laminate. Refer to the Price List for availability of finishes on specific worksurfaces.

Mini Beam Worksurfaces: Support

Rectangular, Inverse Swell, Swell, and Transition mini beam worksurfaces mount parallel to the mini beam only; they include a number of mini beam cantilever brackets and front/rear corner supports appropriate to the width of the specified worksurface. These worksurfaces also include a worksurface support kit that threads into the top of a "L" or "T" mini beam post, which supports one end of the worksurface. See Mini Beam Worksurface Planning section for details on mini beam worksurface planning and application examples.

The 90° Corner, Curved Wrap-Around Corner, and Split Curved Wrap-Around worksurfaces mount only in the corner created by a main beam and a perpendicular mini beam. These worksurfaces include three cantilever brackets: two attach to the main beam, the third to the mini beam.

All mini beam worksurfaces include the appropriate number of support brackets. Mini beam worksurfaces have a height adjustment range of 2" (51mm).



Cantilever and Support Bracket Locations

Worksurfaces are pre-drilled for either right- or left-handed installation of cantilever and support brackets. The illustrations on the next page show the pre-drilled locations of cantilever brackets only. For additional support bracket information, refer to the Price List section.

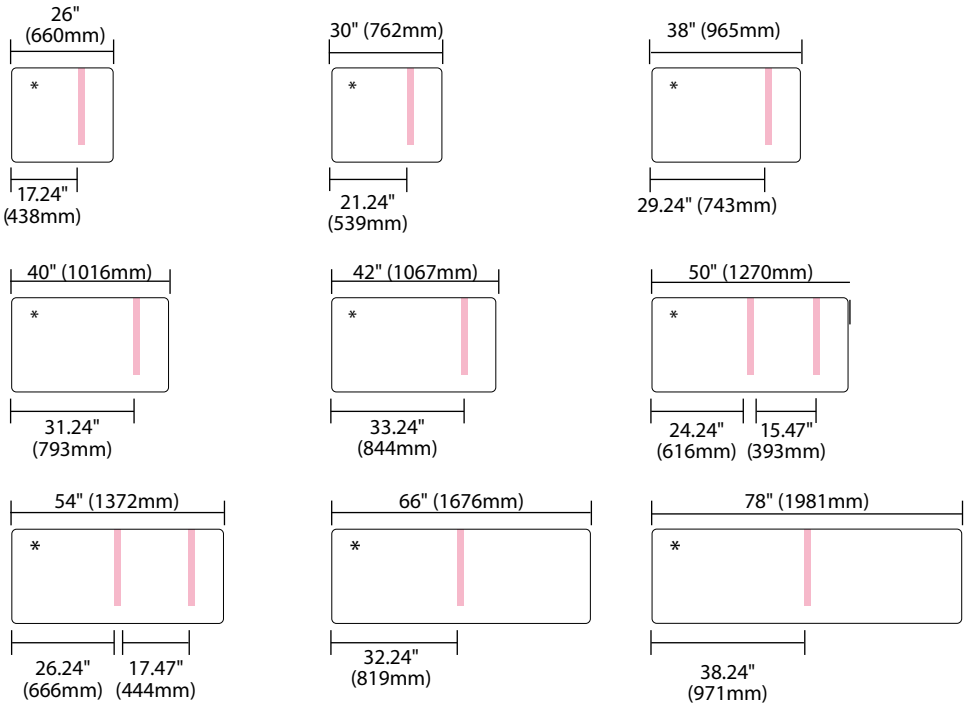
Note **Prior to planning for main beam and mini beam worksurfaces, refer to the Product Application Guidelines section for details on horizontal support and load standards.**

Mini Beam Worksurfaces: Support

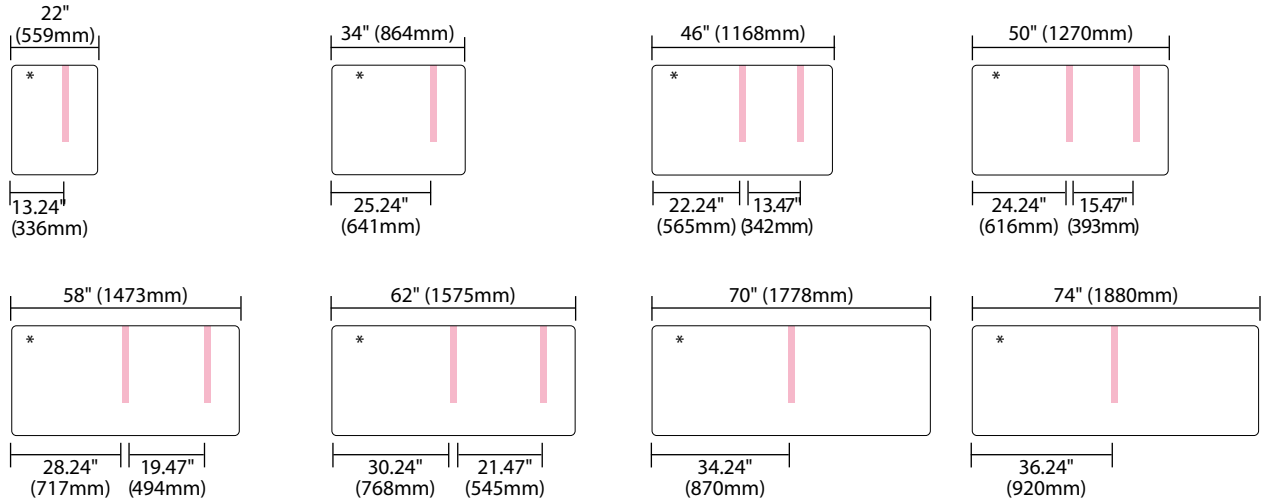
Rectangular, Inverse Swell, Swell, Transition

- The number and placement of cantilever brackets are identical on Rectangular, Inverse Swell, Swell, and Transition Worksurfaces
- Dimension above each worksurface indicates width
- Cantilever brackets are typically placed 7¼" (184mm) from the worksurface edge.

24" (610mm) Depth



28" (711mm) Depth

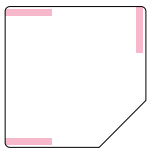


* Location of required Mini Beam "L" or "T" post

Mini Beam Worksurfaces: Support

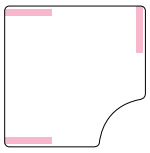
90° Corner

- Used in conjunction with main and mini beam configurations of 90° angle



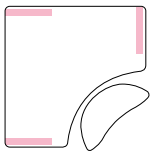
Curved Wrap-Around Corner

- Used in conjunction with main and mini beam configurations of 90° angle
- 36" W x 24" D (shown), 44" W x 24" D, and 44" W x 28" D worksurfaces have cantilevers
- 36" W x 16" D and 48" W x 16" D worksurfaces have cantilevers and convergent support assembly



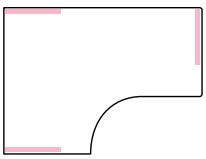
Split Curved Wrap Around

- Used in conjunction with main and mini beam configurations of 90° angle
- Dual worksurface with 1" (25mm) space between the front and rear worksurfaces



Curved Wrap Around Extended

- Used in conjunction with main and mini beam configurations of 90° angle

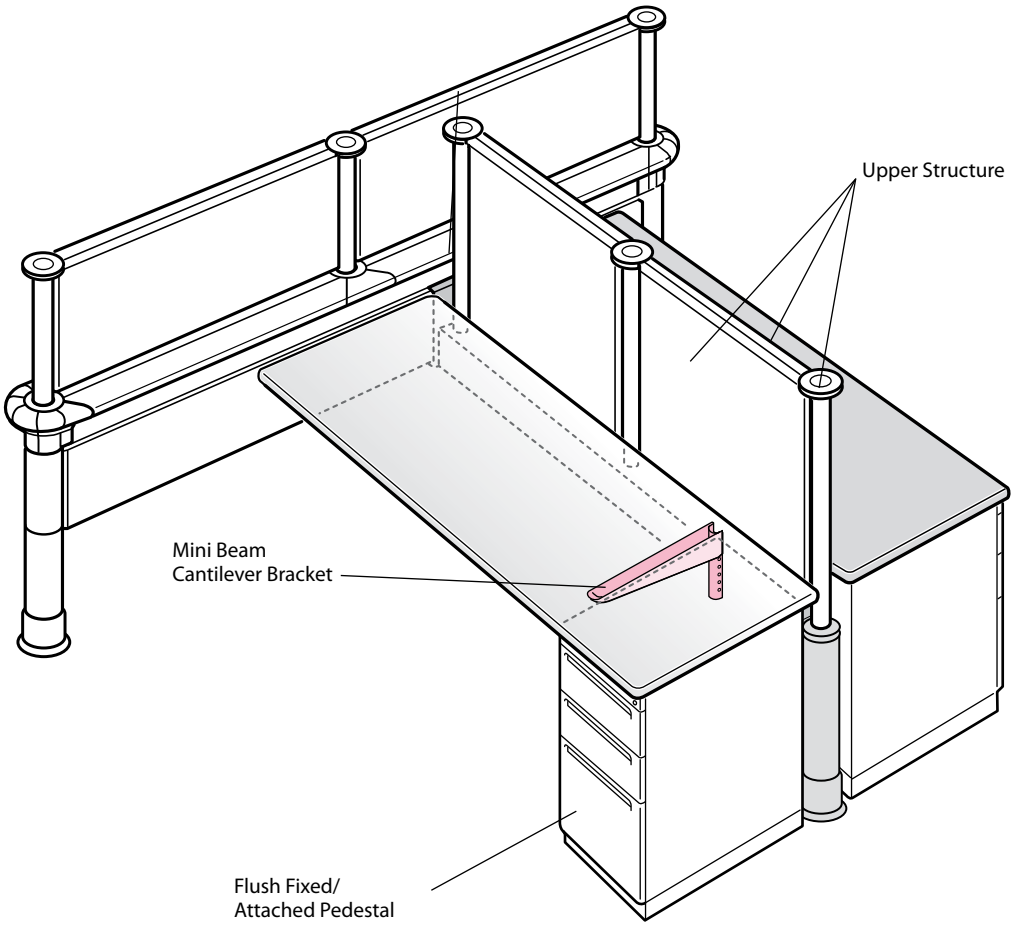


Mini Beam Worksurfaces: Pedestal Guidelines

Specify X Series pedestals with the Cascade vinyl worksurface edge option; specify Standard pedestals with the Standard worksurface edge. Worksurfaces will accept same- or lesser-depth pedestal.

Fixed/attached pedestals cannot provide the sole means of worksurface support. A mini beam cantilever bracket must be installed next to the pedestal on the inside, in order to attach the worksurface to the mini beam.

Fixed/attached pedestals can be used as additional support for mini beam worksurfaces. These pedestals offer extra support for heavy loads on worksurfaces. When using fixed/attached pedestals for support instead of "L" or "T" mini beam posts, overhead storage units or shelves cannot be mounted to the upper structure.



Mini Beam Worksurfaces: Pedestal Guidelines

Suspended Pedestal Locations

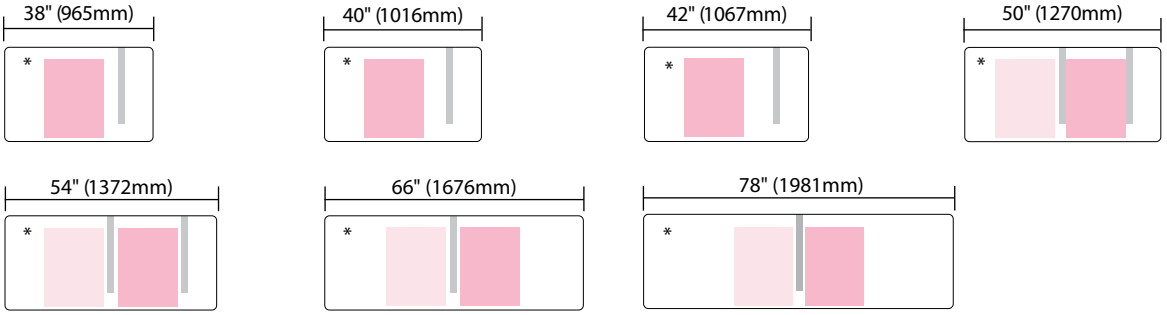
Mini beam rectangular worksurfaces are designed to accept one suspended pedestal only. The illustrations below show the correct locations for 20" (508mm)-deep standard suspended pedestals on 24" (610mm)-deep worksurfaces. Standard pedestals are also available 24" (610mm) deep. X Series pedestals are 18" (457mm) and 24" (610mm) deep.

Worksurfaces 50" wide and greater are pre-drilled for pedestals.

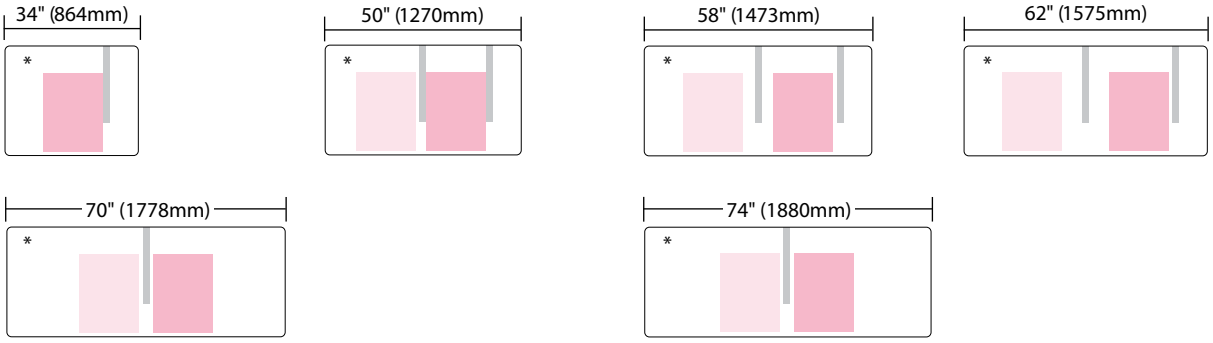
Notes

- **When using lateral file storage under a mini beam worksurface, it will be necessary to relocate cantilevers. Worksurfaces must be attached to the mini beam on both sides of lateral file storage.**
- **If cantilevers are removed to install lateral file storage, overhead storage or shelves cannot be mounted to the mini beam upper structure.**

24" (610mm) Depth Worksurfaces



28" (711mm) Depth Worksurfaces



* Location of required Mini Beam "L" or "T" post

Notes

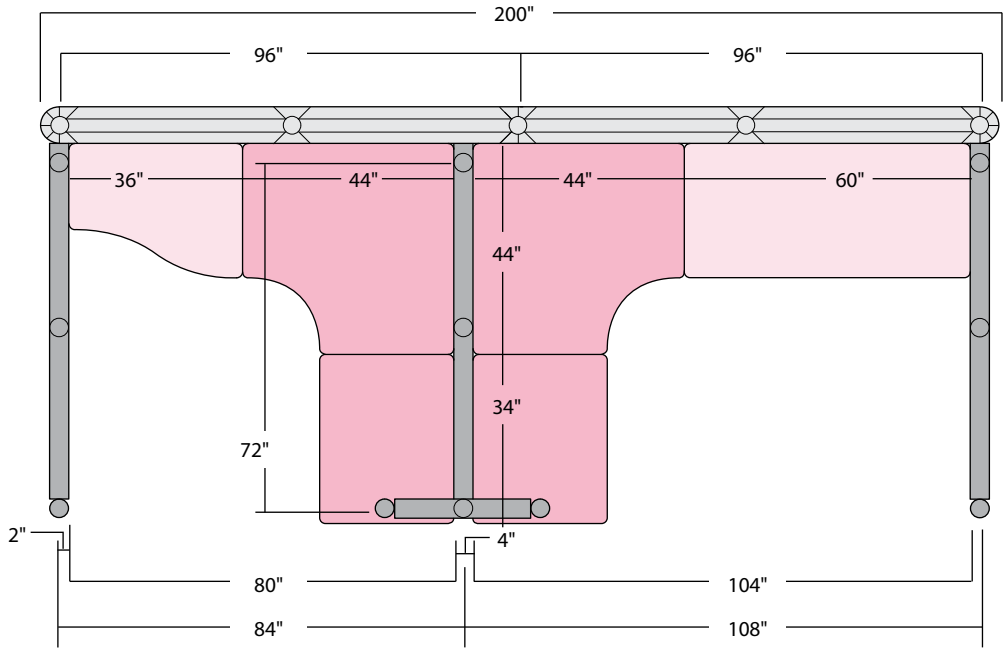
- **Worksurface sizes not listed would require field modification.**
- **Prior to planning for pedestal attachment to mini beam worksurfaces, refer to the Product Application Guidelines section for details on horizontal support and load standards.**

Mini Beam Worksurfaces: Dimension Planning

Worksurface dimensions are actual. Plan for the outside measurements of the worksurfaces using dimensions as published in the Price List section.

This illustration shows how to determine the available interior clearance for mini beam worksurfaces within a configuration of mini beams attached to a main beam run.

- In this example, the overall run of two (2) 96" (2438mm)-long main beams is 200" (5080mm): overall centerpoint-to-centerpoint main beam lengths (96") plus 4" (102mm) on each main beam end:
  - 96" + 96" + 4" + 4" = 200"
- In all cases, the available interior clearance for worksurfaces is determined by the mini beam centerpoint-to-centerpoint distance minus 2" for each mini beam intersection. In this example:
  - 84" – 2" – 2" = 80" interior clearance
  - 108" – 2" – 2" = 104" interior clearance

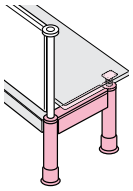


Mini Beam Worksurfaces: Planning

Mini beam Rectangular, Inverse Swell, Swell, and Transition worksurfaces are supported on one end by a mini beam "L" or "T" post. The chart below provides the appropriate application/size relationships between mini beam worksurfaces and "L" and "T" posts.

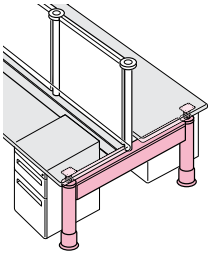
When placing a mini beam worksurface on a mini beam, add 6" (152mm) to the mini beam length to determine the appropriate width for the worksurface. This provides enough worksurface overhang to allow the worksurface support kit (standard with mini beam worksurfaces) to thread into the locating hole on the top of the mini beam "L" and "T" posts.

"L" Post



MINI BEAM WORKSURFACE DEPTH	MINI BEAM 18" "L" POST	MINI BEAM 24" "L" POST
16"	N/A	N/A
24"	Yes; with no Upper Storage or Suspended Pedestals	Yes; with or without Upper Storage or Suspended Pedestals
28"	Yes; with no Upper Storage or Suspended Pedestals	Yes; with or without Upper Storage or Suspended Pedestals

"T" Post



MINI BEAM WORKSURFACE DEPTH	MINI BEAM 24" "T" POST	MINI BEAM 36" "L" POST
16"	Yes, with or without Upper Storage; no Suspended Pedestals	N/A
24"	Yes; with no Upper Storage or Suspended Pedestals	Yes; with or without Upper Storage or Suspended Pedestals
28"	N/A	Yes; with or without Upper Storage or Suspended Pedestals

Note **For maximum stability, specify the mini beam post-to-rail tie bar or post-to-upper post tie bar to connect the mini beam upper structure to the main beam upper structure.**

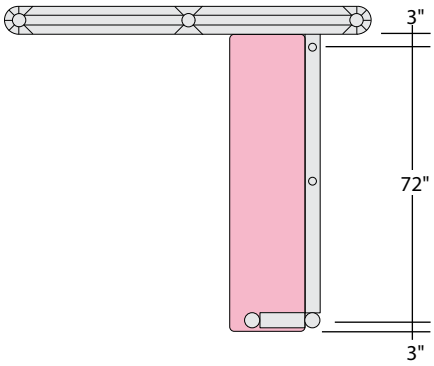
Mini Beam Worksurfaces: Application Examples

The workstation application examples below show you how to apply dimension planning fundamentals in three mini beam worksurface scenarios.

Application Example #1

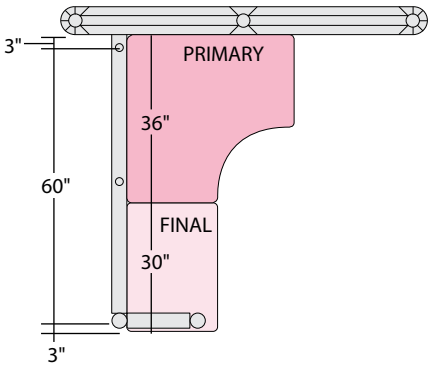
Add 6" (152mm) to the mini beam length to determine the adequate length for the mini beam worksurface.

- 72" + 6" = 78" wide mini beam worksurface



Application Example #2

1) Add 6" (152mm) to the mini beam length to determine the adequate length for the mini beam worksurface(s).
   - 60" + 6" = 66" wide area for mini beam worksurfaces
2) Subtract depth of primary worksurface from interior clearance.
   - 66" – 36" primary worksurface = 30" wide final mini beam worksurface
3) Specify "L" or "T" post depending on application.

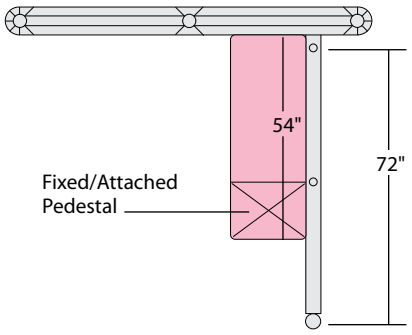


Mini Beam Worksurfaces: Application Examples

Application Example #3

Mini beam worksurface length is less than the mini beam length.

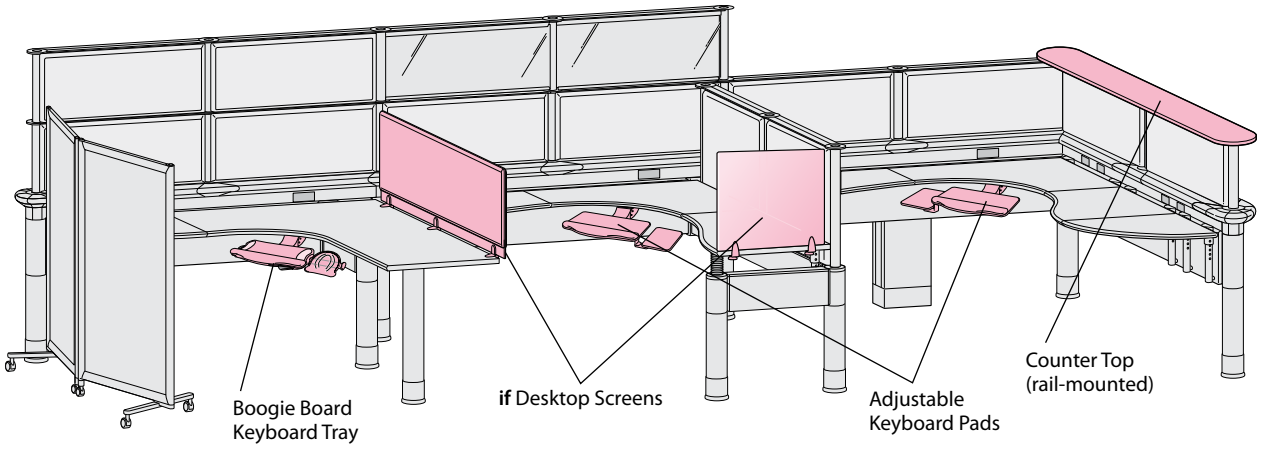
- Use a fixed/attached pedestal.



Notes

- **Fixed/attached pedestals can be used to support mini beam worksurfaces with no upper storage.**
- **Refer to Mini Beam Worksurface Dimension Planning section for optional Mini Beam support methods.**

Worksurface Accessories



Adjustable Keyboard Pads

There are several adjustable keyboard pad models available, each providing a variety of ergonomically beneficial features. Refer to the Price List for complete details.

- Boogie Board Keyboard Tray with Palm Rest (with or without integrated mouse pad):
  - keyboard tray adjusts 6½" (165mm) above worksurface and 4" (102mm) below
  - keyboard tray tilts +/– 15°
  - 360° rotation
- Adjustable Keyboard Tray with Swivel Mouse Pad (AKPM-17-SLM, AKPM-21-SLM):
  - keyboard adjusts 6" (152mm) below worksurface
  - keyboard tray tilts +/– 15°
  - 360° rotation
- Adjustable Keyboard Tray with Swivel Mouse Pad (AKPM-23-SFM):
  - keyboard adjusts 5¼" (133mm) above worksurface and 6¾" (171mm) below
  - keyboard tray tilts +/– 15°
  - 360° rotation

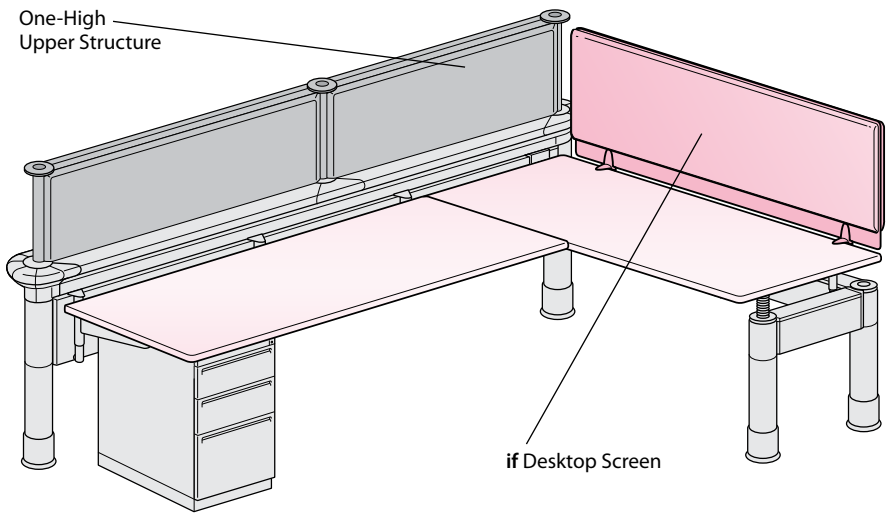
Worksurface Accessories

if Desktop Screens

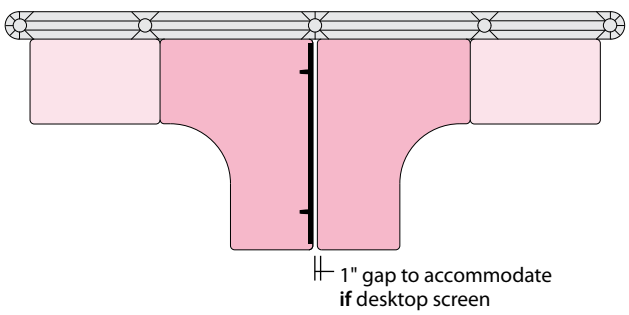
if desktop screens can be used to create visual privacy within semi-private workstations. They're a cost-effective alternative to a mini beam upper structure (upper posts, rails, and acoustic/tackable pads). **if** desktop screens are non-acoustical and non-load bearing.

if Desktop Screen Details

- Available as 1" (25mm)-thick fabric tackable (same fabric and color on both sides) or ¼" (6mm)-thick frosted acrylic
- Fabric desktop screens have a 2¼" (57mm) trim and edge reveal at the bottom. The reveal is standard in Smoke trim color. Frosted screens do not have this feature. Non-directional fabrics only for 72" (1829mm)-wide screens.
- Height: 18" (installed height matches one-high pad height)
- Widths: 24" (610mm), 30" (762mm), 36" (914mm), 42" (1067mm), 48" (1219mm), 60" (1524mm), and 72" (1829mm)
- Shipped with brackets (Metallic finish only) that attach to the edge of mini beam worksurfaces:
  - 60" (1524mm)-wide and narrower have two (2) supports
  - 72" (1829mm)-wide screens have three (3) supports
- Can be mounted off-modular and span multiple worksurfaces
- A 1" (25mm) horizontal gap exists between the worksurface and the bottom of the screen to allow for routing of equipment cords and voice/data communication cables



Note **if desktop screens can be used perpendicular to main beams only (not parallel).**



Note **Allow 1" (25mm) clearance for screen brackets when screen is attached to worksurface edge.**

Counter Tops

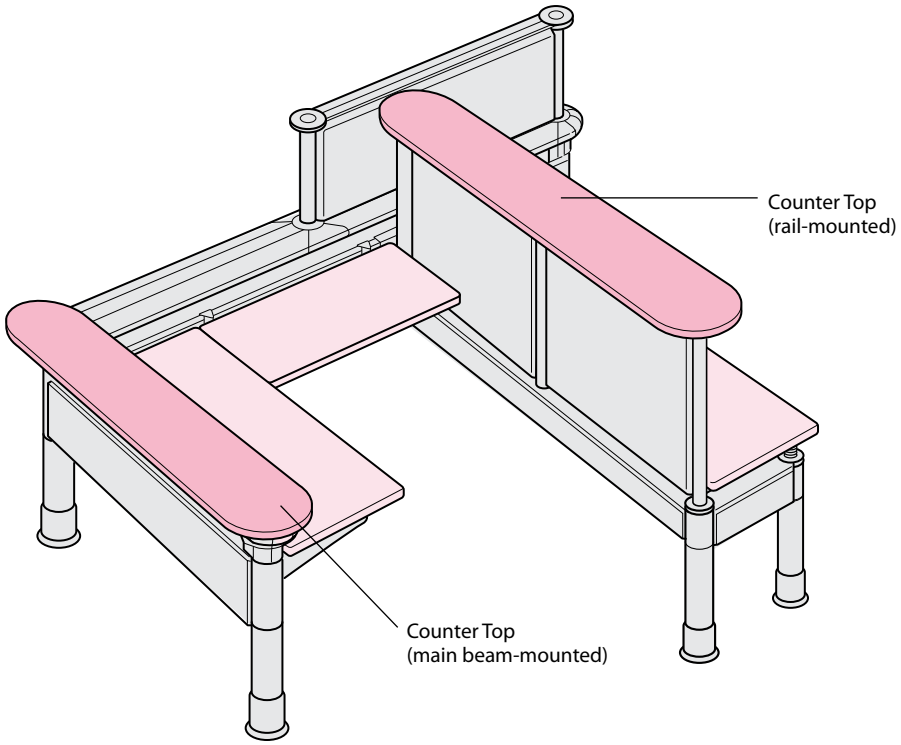
RACE counter tops are designed for mounting above a main beam or one-high upper post and rail. Both versions extend 4" (102mm) beyond the main beam post centerline on either end. For example, the actual width of a 60" (1524mm)-wide counter top is 68" (1727mm).

The main beam counter top mounts just above the top of a main beam using brackets that thread into the top of the universal post and beam mid-point connection locations. It is typically used in reception or high-traffic areas to provide a 12" (305mm)-deep surface at 35½" (902mm) height. When the counter top is installed, access to the internal raceway is restricted. Further, upper posts may not be inserted into the top of the main beam. In 90° main beam applications, an upper structure cannot be constructed perpendicular to the counter top.

The rail-mounted counter top provides a 12" (305mm)-deep surface at 49¼" (1251mm) height. When the counter top is installed in a 90° condition atop a one-high post, rail and pad structure, the structure perpendicular to the counter top will also be one-post high. Because attachment points for the counter top are at the upper post, the rail may be eliminated under the counter top and the space left open. If pads are required under the counter top to fill the space above the main beam, specify a rail to hold the pads.

Counter Tops: General Information

- Depth: 12" (305mm)
- Widths: 36" (914mm), 48" (1219mm), 60" (1524mm), 72" (1829mm), 84" (2134mm), and 96" (2438mm)
- Furnished with appropriate number of supports depending on widths:
  - 36" (914mm) to 60" (1524mm) widths: two bracket assemblies
  - 72" (1829mm) to 96" (2438mm) widths: three bracket assemblies
- Upper structure cannot be used above counter tops



Note **Multiple counter tops cannot be installed end-to-end in a straight-line condition, or in 90° conditions.**

if Mobile Screens

if freestanding mobile screens are used to bring temporary privacy to group environments, to divide space in frequently reconfigured areas, and to create unique design aesthetics. They're a cost-effective alternative to the main beam or mini beam upper structure (upper posts, rails, and acoustic/tackable pads), whenever visual privacy screening alone is the intended function.

Freestanding screens are non-acoustical, non-tackable, and non-load bearing. They may be ordered with the following insert combinations: full fabric, full perforated metal, full frosted acrylic, markerboard/fabric, markerboard/perforated metal and markerboard/frosted acrylic.

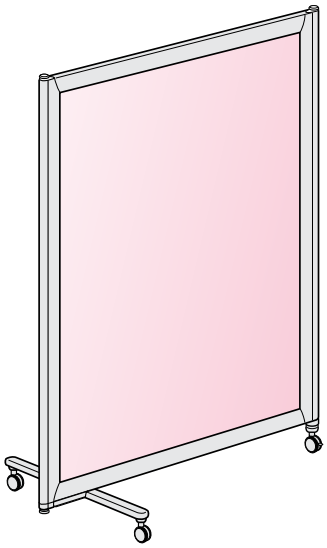
Even the largest freestanding screens move easily, since all sizes are equipped with casters.

Note **The fabric screen insert is available in "warm neutral" and "cool neutral" colors only.**

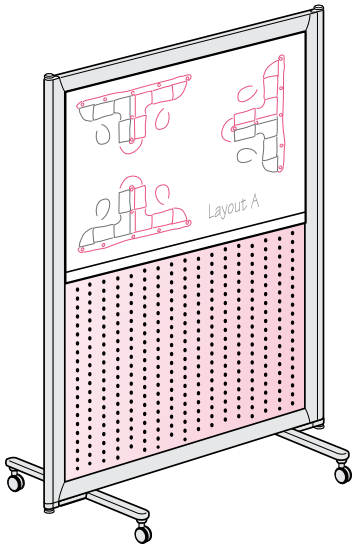
if Freestanding Mobile Screen Details

- Available with full fabric insert, full perforated metal insert, or full frosted acrylic insert **or**
- Available with a two-sided markerboard on top half, and any of the following three inserts on the bottom half: fabric, perforated metal, or frosted acrylic
  - dividing line between top and bottom inserts is at 29½" (749mm) from the floor
  - markerboard screens include a single marker/eraser that can be mounted to the frame
- Overall heights: 47" (1194mm), 52" (1321mm), and 63" (1600mm)
- Widths: 36" (914mm) and 48" (1219mm)
- Frame thickness: 1⅛" (29mm)
- Screen is centered on and secured to the 19" (483mm)-wide T-Leg; T-Leg available in Metallic finish only
- Full fabric insert screen has one post leg with locking caster and one T-Leg base with non-locking casters
- All other screens have two T-Leg bases with two locking casters and two non-locking casters

Full Fabric Insert with One Post Leg and One T-Leg Base



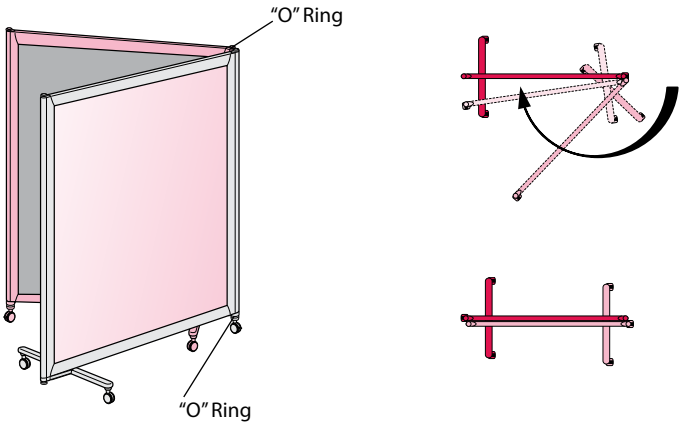
Full Perforated Metal, Full Frosted Acrylic, and Markerboard Combination (shown) Inserts with Two T-Leg Bases



if Mobile Screens: Folding and Ganging Guidelines

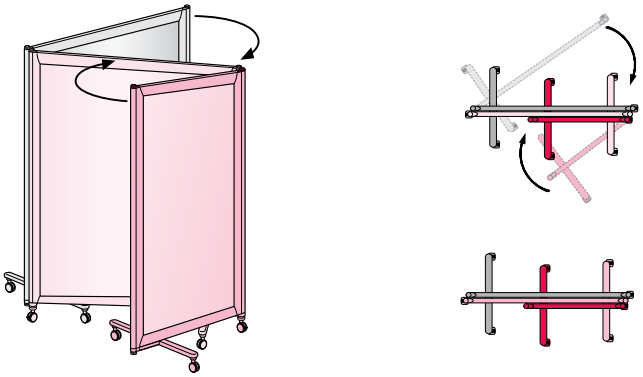
Full Fabric Insert: Same Height/Width

- Two (2) full fabric insert screens having the same height and width can be folded together. Use rubber "O" rings to connect the frame at top and bottom.



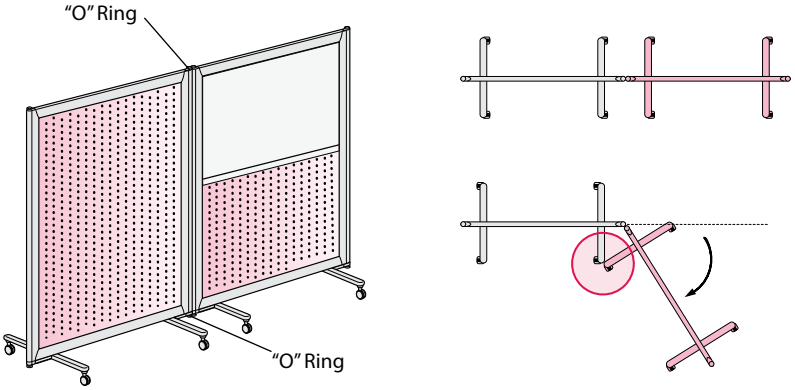
Full Fabric Insert: Same Height/Different Widths

- Three (3) full fabric insert screens having the same height and different widths can be folded together.



Full Perforated Metal, Full Frosted Acrylic Inserts, and Markerboard Combinations

- Non-fabric insert screens cannot be folded together. However, any same-height screens can be ganged together.



Tip

- **There's no limit to the number of same-height freestanding screens that can be ganged together. An "O" ring allows connection of same-height screens (two rings are shipped with each screen). Screens can be ganged post leg to post leg, T-Leg to T-Leg, or post leg to T-Leg.**
- **Full fabric insert screens of same height and width (or same height and different width) can be folded together. Non-fabric screens cannot be folded together.**

if Tables

if table tops are high-pressure laminate-surfaced and available in three shapes to compliment the RACE system: Round, Egg, and Bend top. **if** table base options include X- and 4-Leg base styles.

All **if** tables are designed to increase the worksurface area in an individual office. Smaller tables can be used as a secondary worksurface, or to provide isolated support for equipment. Larger tables are suitable for common meeting areas, conferencing applications, and additional worksurface area.

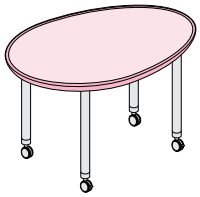
Notes

- **if tables are available with Cascade edge only. Refer to the Price List.**
- **Tables do not accommodate adjustable keyboard pads or suspended pedestals. Exception: The 60" (1524mm)-wide bend top table will accept a 21" (533mm) adjustable keyboard pad.**

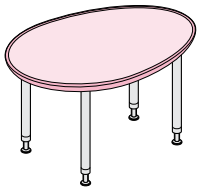
if Table Base Options

Egg Tables

X-Base with casters
or fixed height

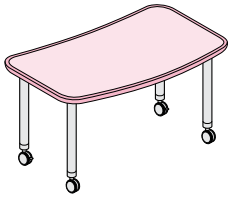


Four Straight Legs with casters;
fixed height

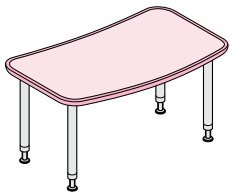


Four Straight Legs
with glides; fixed height

Bend Top Tables



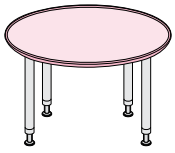
Four Straight Legs with casters;
fixed height



Four Straight Legs with glides;
fixed height

Round Tables

X-Base with glides;
fixed height



Four Straight Legs with glides;
fixed height

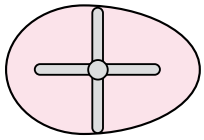
Note **Glides and casters are not interchangeable (i.e. non-field-retrofittable).**

if Tables

Egg Tables

X-Base

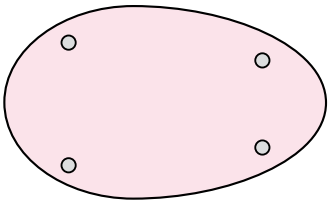
- Width: 36" (914mm)
- Depth: 24" (610mm)
- Fixed height with casters: 29" (737mm)
  - includes two locking casters



X-Base with casters

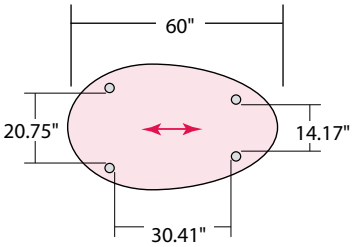
Four Straight Legs

- Width: 60" (1524mm)
- Depth: 36" (914mm)
- Fixed height with casters: 29" (737mm)
  - includes two locking casters
- Fixed height with glides: 29" (737mm)
  - adjustable glide beneath each leg provides height adjustment range of 28½" (724mm) to 29½" (749mm)



Four Straight Legs with casters or glides

Leg Clearance

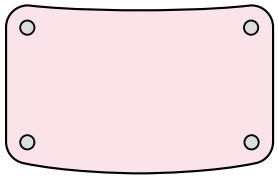


Denotes direction of wood grain laminate. Refer to the Price List for availability of finishes on specific tables.

Bend Top Tables

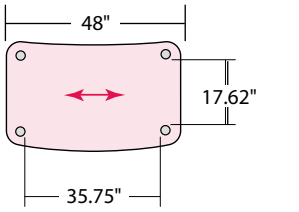
Four Straight Legs

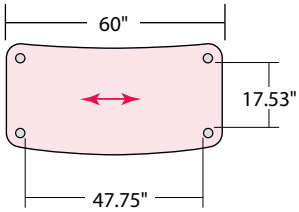
- Widths: 48" (1219mm) and 60" (1524mm)
- Depth: 33" (838mm)
- Fixed height with casters: 29" (737mm)
  - includes two locking casters
- Fixed height with glides: 29" (737mm)
  - adjustable glide beneath each leg provides height adjustment range of 28½" (724mm) to 29½" (749mm)
- 60" (1524mm)-wide table will accept a 21" (533m) adjustable keyboard pad



Four Straight Legs with casters

Leg Clearance





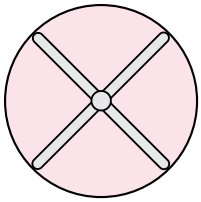
Denotes direction of wood grain laminate. Refer to the Price List for availability of finishes on specific tables.

if Tables

Round Tables

X-Base

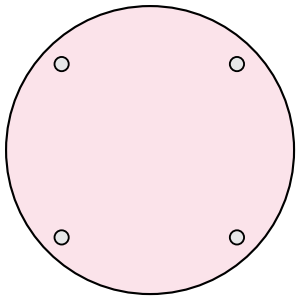
- Diameter: 36" (914mm) and 42" (1067mm)
- Fixed height with glides: 29" (737mm)
- Adjustable glide beneath each leg provides height adjustment range of 28½" (724mm) to 29½" (749mm)



X-Base with glides

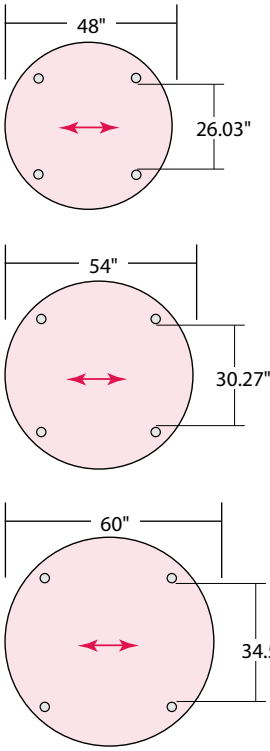
Four Straight Legs

- Diameter: 48" (1219mm), 54" (1372mm), and 60" (1524mm)
- Fixed height with glides: 29" (737mm)
- Adjustable glide beneath each leg provides height adjustment range of 28½" (724mm) to 29½" (749mm)



Four Straight Legs with glides

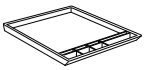
Leg Clearance



Denotes direction of wood grain laminate. Refer to the Price List for availability of finishes on specific tables.

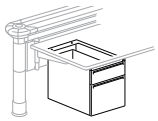
Storage Statement of Line

Worksurface Drawers

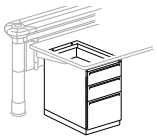


Pencil Drawer (plastic)

Standard Pedestals

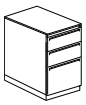


Suspended



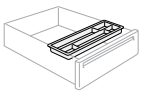
Attached

Mobile

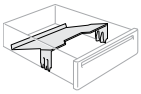


Freestanding

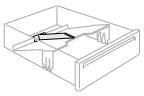
Standard Pedestal Accessories



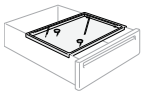
Pencil Tray



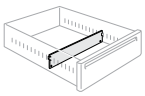
Stationery Organizer



Stationery Organizer Divider

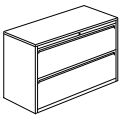


Reference Tray

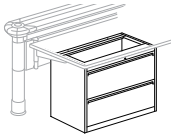


Side-to-Side 6" (152mm) Drawer Divider

950 Series Lateral Files

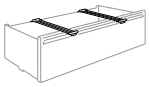


Two-High Freestanding

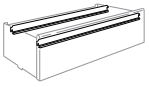


Credenza File

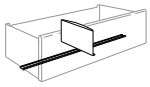
950 Series Lateral File Accessories



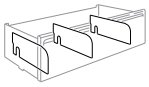
Front-to-Back Hanging Bars



Side-to-Side Hanging Bars

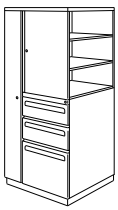


Compressor

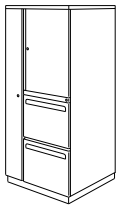


Dividers

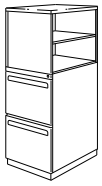
950 Series Personal Storage Towers



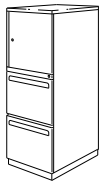
Side Bookcase, 24" (610mm)-wide unit



Hinged Door, 24" (610mm)-wide unit



Side Bookcase, 15" (381mm)-wide unit

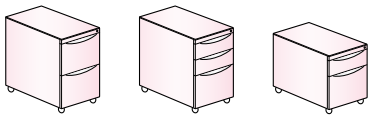


Hinged Door, 15" (381mm)-wide unit

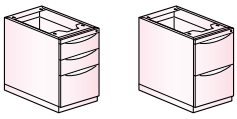
X Series Storage Statement of Line

Pedestals 18", 24", or 30" D (mobile, attached, or suspended)

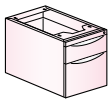
Mobile



Attached

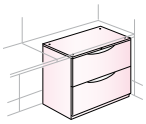


Suspended

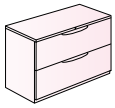


Lateral Files 30", 36", or 42" W x 18.75" D (attached or freestanding)

Two-High Attached

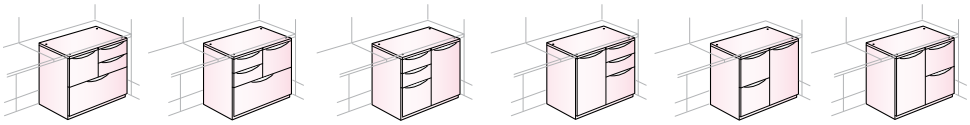


Two-High Freestanding

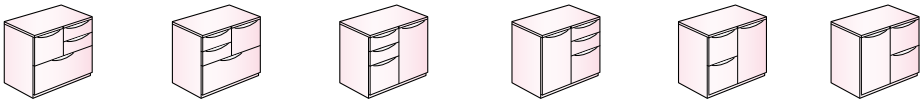


Combination Units 30", 36", or 42" W x 18.75" D (attached or freestanding; available left or right-handed)

Two-High Attached

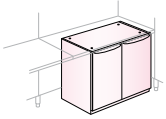


Two-High Freestanding

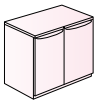


Storage Cabinets 30", 36", or 42" W x 18.75" D

Two-High Attached



Two-High Freestanding

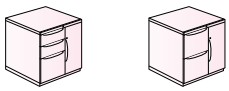


Note **Refer to Steel Casegoods, Files, and Storage Price Book for complete product line.**

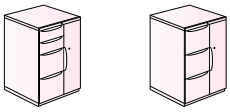
X Series Storage Statement of Line

Personal Storage Towers 24" W x 24" D (doors available left or right-handed and in translucent, wood, or metal)

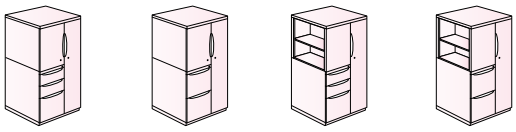
Two-High



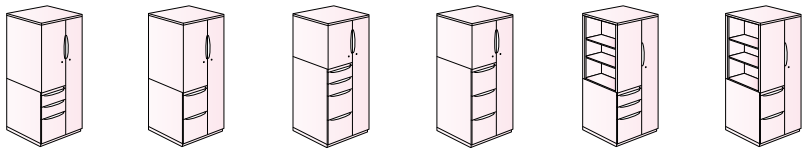
Three-High



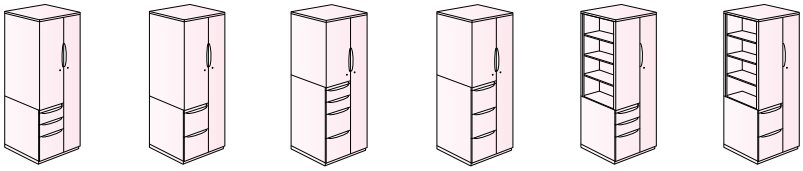
Four-High



Five-High



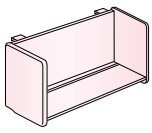
Six-High



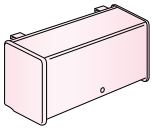
Note **Refer to Steel Casegoods, Files, and Storage price book for complete product line.**

Upper Storage Statement of Line

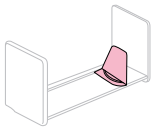
RACE Standard



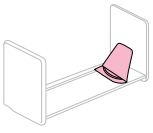
Overhead Storage Shelf



Overhead Storage Unit

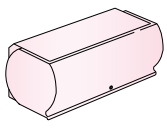


Vertical Divider

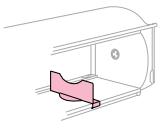


Sloped Divider

OneTouch



Overhead Storage Unit



Shelf Divider

Standard Pedestals

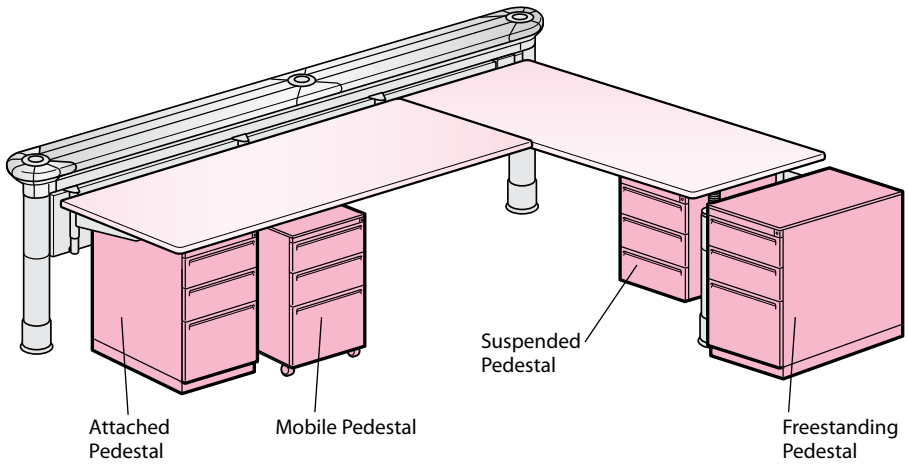
RACE Standard edge worksurfaces are pre-drilled to accommodate standard pedestals. Standard pedestals are available in four styles: suspended, attached, mobile, and freestanding. Standard pedestals are available with Integral Pull or Full Pull option.

Standard Pedestal Features

- Available with or without locks; locks are Chrome finish
- Locks can be field-retrofitted with a drawer lock conversion kit
- All styles available with multiple drawer configuration options; see Price List for details
- Conversion kits available to convert one pedestal style to a different style
- Drawer slides:
  - 12" (305mm) and 15" (381mm) drawer sizes have three-phase, full-extension steel ball-bearing slides
  - 3" (76mm) and 6" (152mm) drawer sizes are equipped with three-quarter extension slides; pedestals with full-extension 6" (152mm) drawers are available, see Price List for details
- Shipped with drawer accessories: see Price List for details on each style
- Additional drawer accessories can be specified separately; see Price List for details

Note **Pedestal placement is between the cantilever brackets of any regular worksurface 24" (610mm) or wider. Typically, the pedestal is positioned at the right or left end of a regular main beam worksurface, or the outer end of a regular mini beam worksurface.**

Standard Pedestal Styles



Standard Pedestal Dimensions

The actual width of all Standard pedestal styles is 15⅜" (391mm). See the following page for actual heights of specific styles.

Standard Pedestal Depths

NOMINAL	ACTUAL
20" (508mm)	19⅝" (499mm)
24" (610mm)	22⅞" (581mm)

Tips

- **All drawer interiors, shelves, and interior accessories are finished in black.**
- **Separately specified standard pedestal drawer accessories are packaged and shipped separately for field installation.**

Standard Pedestals

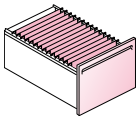
Standard Pedestal Details

- Suspended pedestals do not extend to the floor, so they rely on the worksurface for support
  - heights: 19" (483mm) and 22" (559mm)
- Fixed pedestals have an open-top design, so they are always positioned to attach beneath a worksurface next to a cantilever bracket
  - 27⅞" (708mm)-high units
  - include four glides having a vertical height adjustment range of 1¾" (44mm)
- Mobile pedestals can be used anywhere in the office or under a worksurface
  - shipped with finished tops
  - equipped with four dual-wheel casters (2 swivel, 2 non-swivel)
  - available in 24¾" (629mm) or 27¾" (705mm) heights for under-worksurface placement
- Stationary pedestals can be specified for freestanding applications, including side-by-side to create a credenza unit
  - 27⅞" (708mm)-high units shipped with finished tops
  - include four glides having a vertical height adjustment range of 1" (25mm)

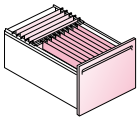
Note **Fixed pedestals are not designed to replace worksurface cantilevers. For details on worksurface support guidelines, refer to the Worksurfaces section.**

Standard Pedestals: Drawer Filing Capacities

20" (508mm)-deep

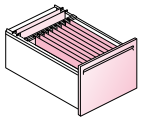


15⅝" (397mm)
letter filing,
front-to-back



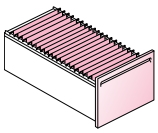
12⅝" (321mm)
letter filing,
side-to-side

3½" (89mm)
letter filing,
front-to-back

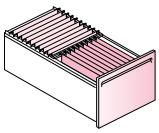


12⅝" (321mm)
legal filing,
side-to-side

24" (610mm)-deep

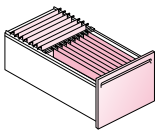


18⅞" (479mm)
letter filing,
front-to-back



12⅝" (321mm)
letter filing,
side-to-side

6¾" (171mm)
letter filing,
front-to-back



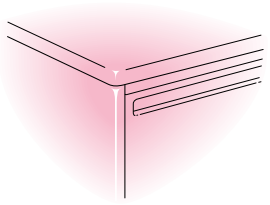
12⅝" (321mm)
legal filing,
side-to-side

3¾" (95mm)
letter filing,
front-to-back

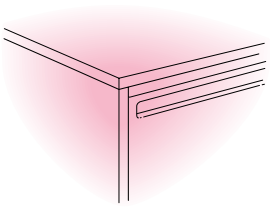
950 Series Two-High Lateral Files

950 Series two-high lateral files are available in two styles: freestanding (with a finished top) or credenza (for attachment underneath worksurfaces). Both two-high units are available in a 3/8" (10mm) radius- or square-edge detail. The edge detail applies to the vertical edges of the case. To specify either option, follow the specification instructions in the Price List. There are two pull options available: Integral Pull or Full Pull.

Radius Edge



Square Edge



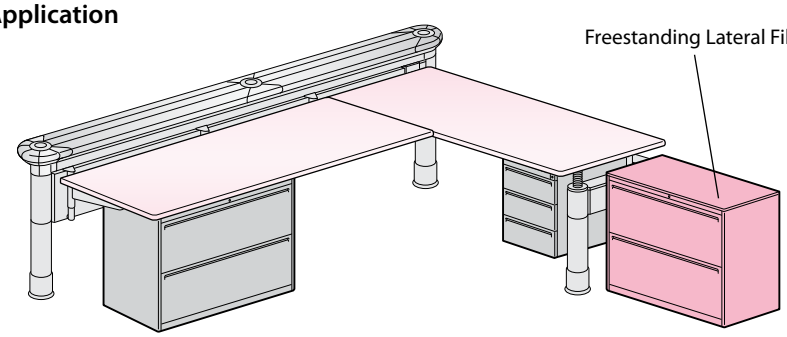
950 Series Two-High Lateral Files: General Information

- Height: 27¾" (705mm)
- Depth: 18" (457mm)
- Widths: 30" (762mm), 36" (914mm), and 42" (1067mm)
- Available with or without locks; locks are Chrome finish
- Locks can be field-retrofitted with a drawer lock conversion kit
- Equipped with two 12" (305mm)-high drawers:
  - can be specified with side-to-side hanging bars or front-to-back hanging bars for suspending file folders
- Additional drawer accessories can be specified separately; see Price List.

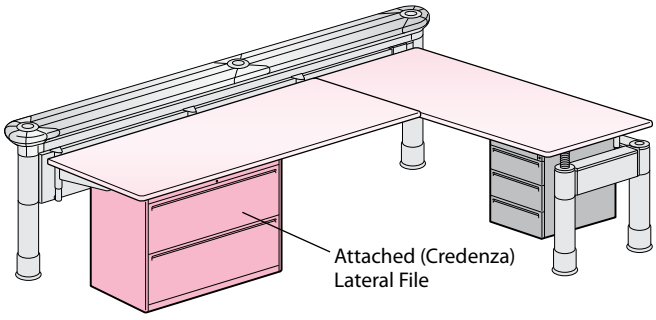
Notes

- **On freestanding models, a counterweight is available as factory-installed or optional; a counterweight must be specified when the lateral file is not ganged or attached to a wall. On attached (credenza) models, a counterweight is available as factory-installed or optional as well.**
- **For details on credenza lateral file attachment, see Worksurfaces section.**

Freestanding Application



Attached Application



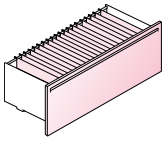
Tips

- **All drawer interiors, shelves, and interior accessories are finished in black.**
- **Separately specified 950 Series lateral file accessories are packaged and shipped separately for field installation. For details, refer to the Price List.**

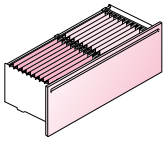
950 Series Two-High Lateral Files

950 Series Two-High Lateral Files: Drawer Filing Capacities

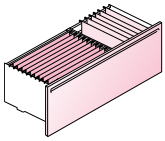
30" (762mm)-Wide



26½" (673mm)
Letter, Legal, EDP Filing
(side-to-side)



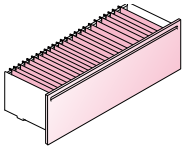
31" (787mm)
Letter Filing
(front-to-back,
two rows)



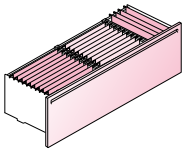
15½" (394mm)
Legal/EDP Filing
(front-to-back) and

10" (254mm) Legal/
EDP Filing
(side-to-side)

36" (914mm)-Wide

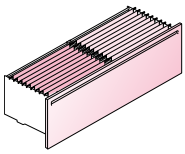


32½" (826mm)
Letter, Legal, EDP Filing
(side-to-side)



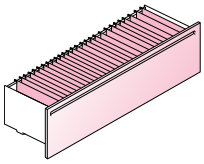
31" (787mm)
Letter Filing
(front-to-back,
two rows) and

6⅛" (156mm)
EDP Filing
(side-to-side)

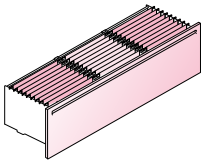


31" (787mm)
Legal/EDP Filing
(side-to-side,
two rows)

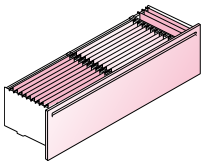
42" (1067mm)-Wide



38½" (978mm)
Letter, Legal, EDP Filing
(side-to-side)



46½" (1181mm)
Letter Filing
(front-to-back,
three rows)



31" (787mm)
Legal/EDP Filing
(front-to-back,
two rows) and

6¼" (159mm) Legal/
EDP Filing
(side-to-side)

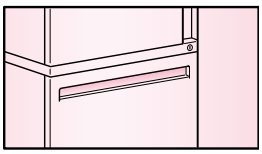
Personal Storage Towers

950 Series personal storage towers are independent, freestanding metal units designed to augment the storage capacity of individual or team workspaces. The towers are available with or without a valet module. With the valet, towers are 24" (610mm) wide; without the valet, towers are 15¼" (387mm) wide.

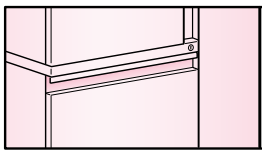
Door/Drawer Pull Options

Personal storage towers are available with two drawer pull styles: Full Pull and Integral Pull. Pulls are designed for compatibility with other storage components specified in your work environment.

Integral Pull



Full Pull

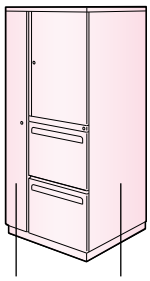


Personal Storage Tower Details: 24" (610mm)-Wide Units

24" (610mm)-wide units are available in the following heights: 45¼" (1148mm), 62½" (1588mm), and 72½" (1842mm). Regardless of its height, each storage tower consists of three distinct modules:

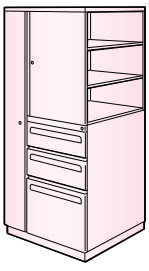
- Pedestal module:
  - 15¼" (387mm) wide x 23" (585mm) deep
  - available with three drawer configurations
- Personal storage module:
  - 15¼" (387mm) wide x 23" (585mm) deep
  - hinged door opening to a storage compartment equipped with 21½" (546mm)-deep shelves; shelves adjust in 2¼" (57mm) increments, or
  - side bookcase accessible from the side of the tower, above the pedestal; includes 14½" (368mm)-deep shelves; shelves adjust in 2¼" (57mm) increments
- Valet module:
  - 8¾" (222mm) wide x 23" (585mm) deep tower
  - specified as a right- or left-handed unit; location is determined by the valet's side position when facing the front of the pedestal module
  - includes one coat rod

Hinged Door Option



(left-hand shown)

Side Bookcase Option



Translucent Top

Tips

- **Pedestal, hinged door personal storage, and valet modules each feature a standard lock. Black lock plugs are shipped keyed-alike for field installation.**
- **The translucent top option adds 2¾" (70mm) to the cabinet's overall height.**
- **Casters are available on 45¼" (1148mm)-high units; casters add 3" (76mm) to the unit's overall height.**

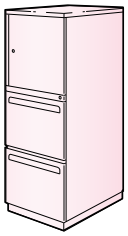
Personal Storage Towers

Personal Storage Tower Details: 15¼" (387mm)-Wide Units

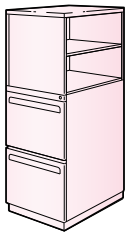
15¼" (387mm)-wide units are available in the following heights: 45¼" (1148mm) and 62½" (1588mm). Regardless of its height, each Personal Storage Tower consists of two modules:

- Pedestal module
  - 15¼" (387mm) wide x 23" (585mm) deep
  - available with three drawer configurations
- Personal storage module
  - 15¼" (387mm) wide x 23" (585mm) deep
  - hinged door opening to a storage compartment equipped with 21½" (546mm)-deep shelves; shelves adjust in 2¼" (57mm) increments, or
  - side bookcase accessible from the side of the tower, above the pedestal; includes 14½" (368mm)-deep shelves; shelves adjust in 2¼" (57mm) increments

Hinged Door Option

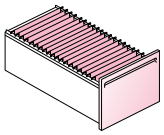


Side Bookcase Option

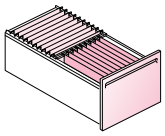


Pedestal Drawer Filing Capacities

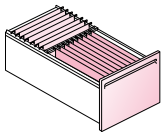
23" (584mm)-deep Drawers



18⁷⁄₈" (479mm)
Letter Filing



19³⁄₈" (492mm)
Letter Filing



16³⁄₈" (416mm)
Letter/Legal Filing

Note **Casters are not available on 15¼" (387mm)-wide personal storage towers.**

Tip **Pedestal and hinged door personal storage modules each feature a standard lock. Black lock plugs are shipped keyed-alike for field installation.**

X Series Pedestals

Race Cascade edge worksurfaces are pre-drilled to accommodate X Series pedestals. X Series pedestals are available in three styles: suspended (hangs from worksurface), attached (attaches to underside of worksurface and includes base), and mobile (dual-wheel casters, with a finished top).

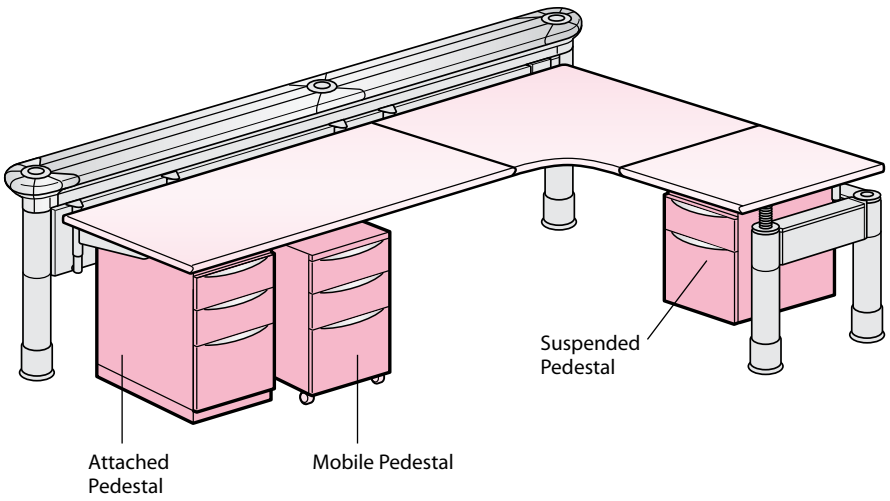
X Series Pedestal Features

- Available mobile, attached, or suspended
- Case construction utilizes a patent-pending rear insert stiffener that exponentially strengthens the case
- Direct locking system engages the steel lock bar directly into the steel full length drawer body for optimum security
- Full-extension steel ball-bearing slides on all drawers provide smooth operation and complete access to drawer contents
- Durable hybrid powdercoat finish is applied over a rust-inhibiting phosphate pre-treatment
- Locks standard
- Core removable lock allows key numbers to be easily changed on the job site
- Six pull styles available to allow for coordination with a variety of office environments
- Drawer fronts are proud and available in painted steel, painted perforated patterns or wood for design flexibility
- Inner drawer fronts provide added strength and prevent loose materials from falling into the outer fronts
- Glides provide 1½" adjustment range

Mobile Pedestal

- 1.5" diameter fixed dual wheel casters in front and swivel casters on rear

X Series Pedestal Styles



Note **Pedestal placement is between the cantilever brackets of any regular worksurface 24" (610mm) or wider. Typically, the pedestal is positioned at the right or left end of a regular main beam worksurface, or the outer end of a regular mini beam worksurface.**

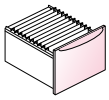
Tips

- **All drawer interiors, shelves, and interior accessories are finished in black.**
- **Separately specified pedestal drawer accessories are packaged and shipped separately for field installation.**

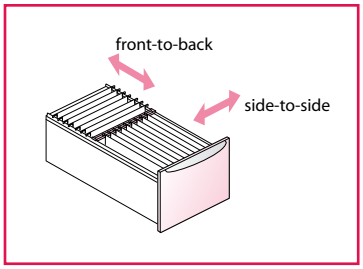
X Series Pedestal Drawers: File and Load Capacity

Pedestal and Personal Storage Tower Pedestal Drawer Capacities

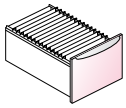
17" (457mm)-Deep Pedestal



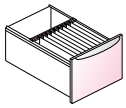
137/8" (422mm) Letter Filing



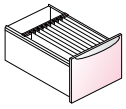
23" (584mm)-Deep Pedestal



197/8" (505mm) Letter Filing

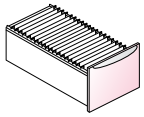


117/8" (302mm) Letter Filing

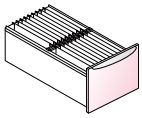


117/8" (302mm) Legal Filing

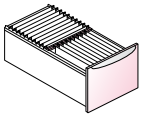
29" (737mm)-Deep Pedestal



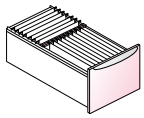
257/8" (657mm) Letter Filing



23¾" (603mm) Letter Filing



247/8" (632mm) Letter Filing



217/8" (556mm) Legal and Letter Filing

Pedestal Drawer Weight Load Capacities: Drawer Test Load Values Per Drawer Size

X Series

NOMINAL SIZE	CLEAR HEIGHT	DRAWER DEPTH	WIDTH	CASE DEPTH	CUBIC INCHES	LOAD
6"	5"	14.25"	12.5"	18"	890"	15 lbs.
12"	10.25"	14.25"	12.5"	18"	1825"	31 lbs.
6"	5"	20.25"	12.5"	24"	1265"	22 lbs.
12"	10.25"	20.25"	12.5"	24"	2594"	44 lbs.
6"	5"	26.25"	12.5"	30"	1640"	28 lbs.
12"	10.25"	26.25"	12.5"	30"	3363"	57 lbs.

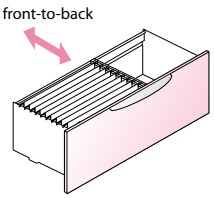
Note **Drawer load ratings are based on BIFMA load requirement 0.017 lbs per cubic inch of drawer volume. All X Series products meet or exceed BIFMA weight load capacities.**

Tip **Refer to Steel Casegoods, Files, and Storage Price Book for complete product line.**

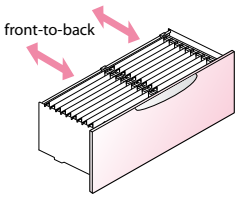
X Series Lateral File Drawers: File and Load Capacity

Lateral Drawer Capacities

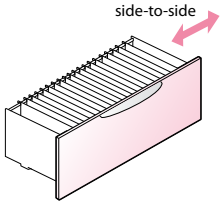
30" (762mm)-Wide Lateral File



15½" (394mm) Legal or EDP Filing

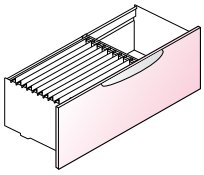


31" (787mm) Letter Filing

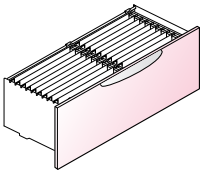


26½" (673mm) Letter, Legal, or EDP Filing

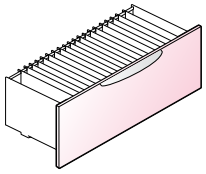
36" (914mm)-Wide Lateral File



31" (787mm) Legal Filing or 15 ½" (394mm) EDP Filing (1 row)

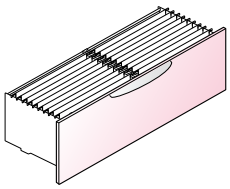


31" (787mm) Letter Filing

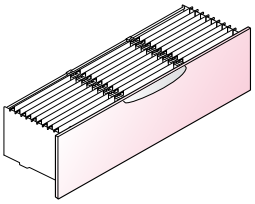


32½" (826mm) Letter, Legal or EDP Filing

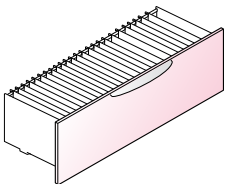
42" (1067mm)-Wide Lateral File



31" (787mm) Legal or EDP Filing



46½" (1181mm) Letter Filing



38½" (978mm) Letter, Legal or EDP Filing

Lateral Drawer Weight Load Capacities: Drawer Test Load Values Per Drawer Size

NOMINAL SIZE	CLEAR HEIGHT	DEPTH	WIDTH	CUBIC INCHES	LOAD
12 x 30"	11.4"	15.56"	26.56"	4711"	80 lbs.
12 x 36"	11.4"	15.56"	32.56"	5776"	98 lbs.
12 x 42"	11.4"	15.56"	38.56"	6840"	116 lbs.

Note **Load categories are based on inches x 0.017 (BIFMA loading requirements). All X Series products meet or exceed BIFMA weight load capacities.**

Tip **Refer to Steel Casegoods, Files, and Storage Price Book for complete product line.**

X Series Two-High Lateral File

X Series two-high lateral files are available in two styles: freestanding (with a finished top) or attached (for attachment underneath worksurfaces).

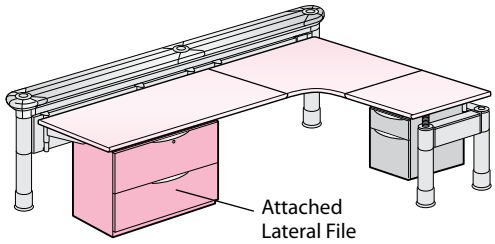
X Series Two-High Lateral File Features

- One-piece inner top provides upper support and prevents case racking
- Core removable lock allows key numbers to be easily changed on the job site. Lateral files can be keyed alike with pedestals, overhead units, and other storage items
- Rack and pinion lock design ensures reliable operation
- Dual side lock bars latch both drawer ends to prevent drawers from being pried open
- One-piece case construction provides a clean, finished appearance with no overlapping seams
- Baked enamel finish applied over rust inhibiting treatment assures durability and beauty for the life of the product
- Patent-Pending box-in-box base construction exponentially strengthens the case to prevent racking
- Drawer fronts are proud and available in painted steel, painted perforated patterns, or wood for design flexibility
- Pulls are available in Ellipse, Radius, and Taper styles to allow for coordination with a variety of office environments
- Full-extension steel ball-bearing slides provide smooth operation and complete access to contents
- Positive drawer interlock system allows only one drawer to open at a time to provide greater safety

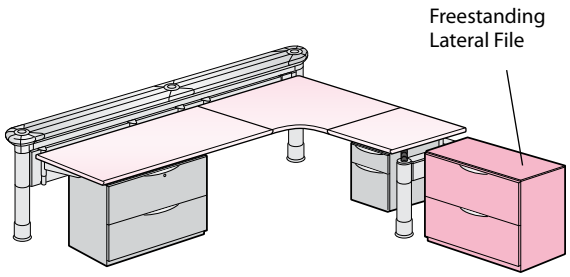
Lateral File

- 12" lateral file drawers accommodate letter, legal, EDP, A4 International, and Foolscap for complete flexibility in user filing needs
- Side-to-side hanging bars are standard. Optional dividers, compressors, front-to-back hanging bars, and CD holders are available for a variety of filing and storage needs
- Leveling glides have a 1½" height adjustment to allow for installation on uneven floors

Attached Application



Freestanding Application



LATERAL FILE	ACTUAL HEIGHT	ACTUAL DEPTH	WIDTH
Lateral File with Glides Dimensions	Two-High = 27½"	18¾"	30" = 29⅞" 36" = 35⅞" 42" = 41⅞"
Lateral File with Legs	Two-High = 32⅝"	18¾"	30" = 29⅞"

Notes

- **Freestanding models are shipped standard with a counterweight. Attached models do not include a counterweight.**
- **For details on credenza lateral file attachment, see Worksurfaces section.**

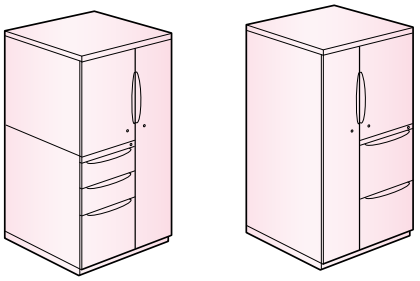
Tips

- **All drawer interiors, shelves, and interior accessories are finished in black.**
- **Separately specified X Series lateral file accessories are packaged and shipped separately for field installation.**
- **Lateral files cannot be stacked on top of each other or on other components.**

X Series Personal Storage Tower

Standard Features

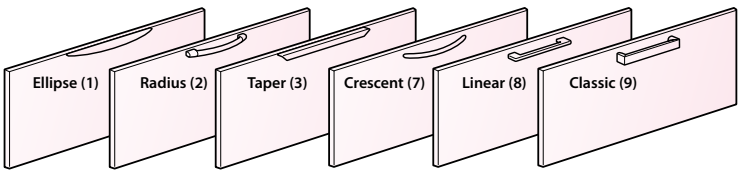
- Direct locking system engages the steel lock bar directly into the steel drawer body for optimum security
- Full-extension steel ball-bearing slides on all drawers provide smooth operation and complete access to drawer contents
- Durable hybrid powdercoat finish is applied over a rust inhibiting phosphate pre-treatment
- Locks standard
- Core removable lock allows key numbers to be easily changed on the job site
- Drawer fronts are proud and available in painted steel, painted perforated steel, and wood
- Inner drawer and door fronts provide added strength and prevent loose materials from falling into the outer front
- Door hinges open at 110˚ for easy access
- Six pull styles available to allow for coordination with a variety of office environments
- Includes one pencil tray and dividers for box drawers, one compressor in file drawers; shelves in hinged door and bookcase and coat rod in valet
- Shelves adjust in increments of 2½"



Product Features

X Series Pull Options

Six pull types are offered in X Series: Ellipse, Radius, Taper, Crescent, Linear, and Classic. Some handles can be interchanged: Radius with Taper, Taper with Radius, Crescent with Linear or Classic, Linear with Crescent or Classic, and Classic with Crescent or Linear. Ellipse is not interchangeable.

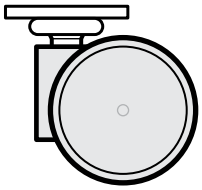


Note **Ellipse pull matches PREMISE® pull.**

X Series Product Features

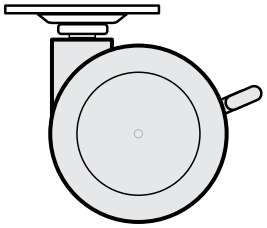
X Series Caster Option

Casters are available on some X Series pedestals and personal storage towers.



Pedestal Caster

- Caster replaces base on the pedestal and overall height remains the same
- Dual wheel
- 1.5" diameter, non-locking
- Front wheel fixed, rear swivel

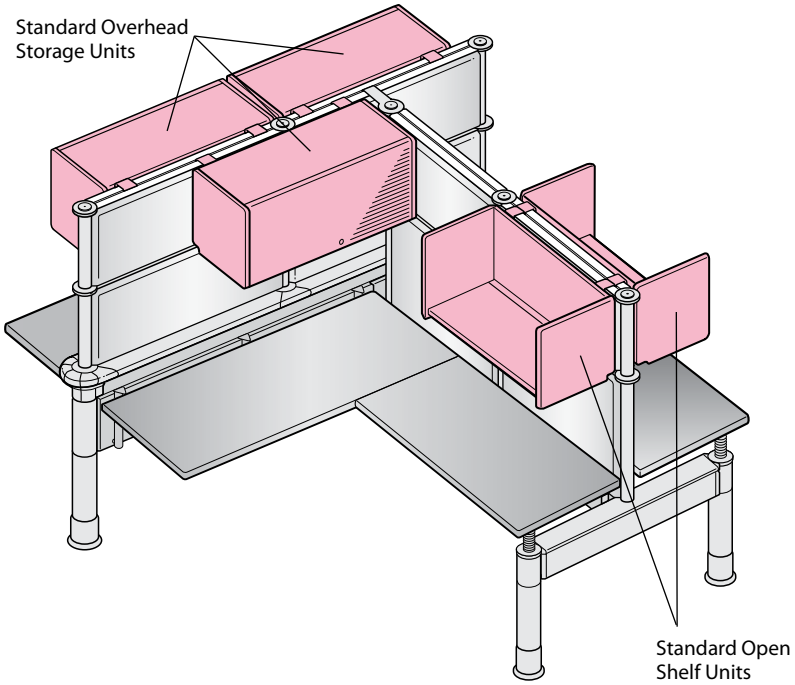


Personal Storage Tower Caster

- Add 3" to overall height
- Dual wheel
- 2.9" diameter
- Front — non-locking, fixed
- Rear — locking, swivel

RACE Standard Overhead Storage

- Steel casing with full-height back
- Anti-dislodgment clip on mounting brackets
- Vertical and sloped dividers fit into slots at 1½" (38mm) increments to subdivide interior space
- A separately specified RACE Adaptable task light may be of equal or less width than the unit to which it is attached; for details on task light options, refer to the Price List



Overhead Storage Shelf Details

- Height: 15" (381mm); accommodates vertical storage of binders and standard domestic and international paper sizes
- Depth: 15½" (394mm)
- Widths: 32" (813mm), 44" (1118mm), and 56" (1422mm)

Overhead Storage Unit Details

- Height: 15½" (394mm); accommodates vertical storage of binders and standard domestic and international paper sizes
- Depth: 15½" (394mm)
- Widths: 32" (813mm), 44" (1118mm), and 56" (1422mm)
- Distinctive ribbed steel door equipped with ball-bearing suspension, allowing you to open door from either end of the center without binding the mechanism; opened door lays flat on top of the unit
- Lock plug (Chrome finish); keying options are random, keyed-alike, or master-keyed

RACE Standard Overhead Widths

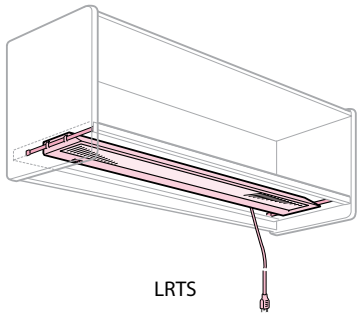
NOMINAL	ACTUAL
36" (914mm)	32" (813mm)
48" (1219mm)	44" (1118mm)
60" (1524mm)	56" (1422mm)

Notes

- **Standard open shelf and overhead storage units can attach to main beam one- or two-high upper post structures; they cannot stack above each other, however. Mini beam structures will support overhead storage units on two-high upper posts. Overhead storage mounted on a mini beam one-high structure requires modification to the overhead part number; see Price List.**
- **End panels are not available in Metallic Silver (TR-LE).**

RACE Task Lighting

RACE Adaptable task lights can be mounted below RACE Standard Overhead Storage only. Their acrylic lenses provide a prismatic light distribution with an optional batwing lens. Lights are shipped standard with T8 fluorescent lamps which have a 20,000 hour rated life. All lights utilize electronic ballasts which are energy efficient, provide greater light output, and operate at a lower temperature — reducing energy consumption up to 40%.



LRTS

Power

Task lights are shipped with a 6' (1829mm) power cord installed on the fixture's right-hand side; the cord can be field-retrofitted to a left-hand orientation on 42" and 54" lights. An optional 9' (2743mm) cord is available. Chicago Electrical code lights are also available.

Adaptable Components, Fixed-Intensity, Electronic Ballast: LRTS Series

NOMINAL SIZE	ACTUAL SIZE	LAMP	WATTS	POWER FACTOR	STANDARD BALLAST	STANDARD LENS
30" (762mm)	25" (635mm)	3500K 17W T8*, 24" (610mm) long	17	Normal (>.5)	Electronic	Prismatic
42" (1067mm)	37" (940mm)	3500K 25W T8*, 36" (914mm) long	25	Normal (>.5)	Electronic	Prismatic
54" (1372mm)	49" (1245mm)	3500K 32W T8*, 48" (1219mm) long	32	Normal (>.5)	Electronic	Prismatic

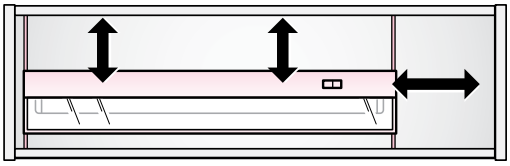
* Only T8 Tri-Phosphor Octic lamps can be used.

Task Light Mounting

Task lights are shipped with mounting brackets for installation under RACE Standard Overhead Storage only.

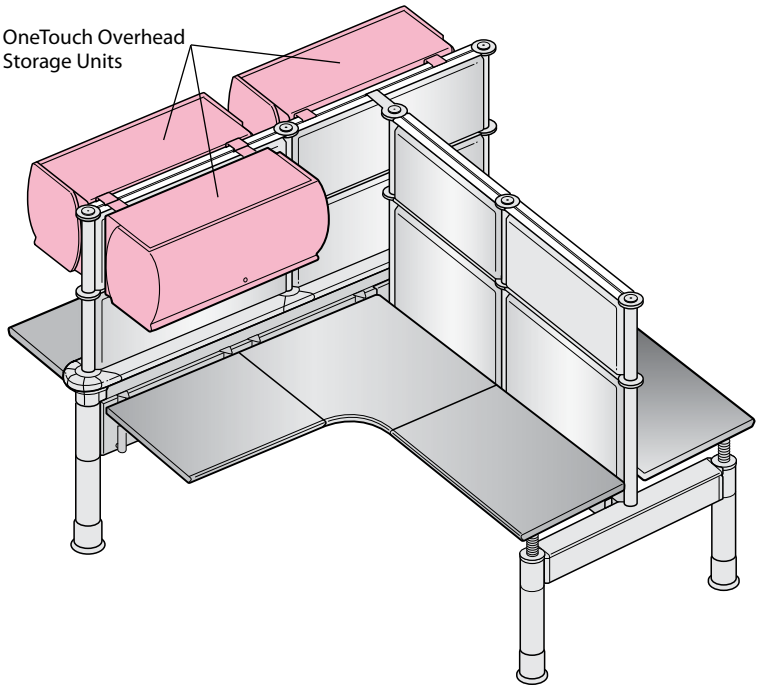
- Narrower-width units, brackets allow both front-to-back and side-to-side fixture adjustment
- Task light is flush to underside of shelf of RACE Overhead Storage

Front-To-Back and Side-To-Side Adjustment



OneTouch Overhead Storage

- Steel casing with full-height back
- Anti-dislodgment mechanism
- Shelf dividers can be used anywhere along the shelf to subdivide interior space
- A separately specified Adaptable task light may be of equal or less width than the unit to which it is attached; for details on task light options, refer to Task Light section and the Price List

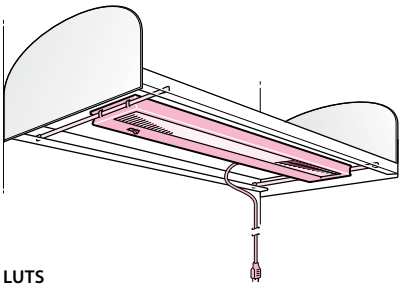


Overhead Storage Unit Details

- Height: 16" (406mm); accommodates vertical storage of binders and standard domestic and international paper sizes
- Depth: 18" (457mm)
- Widths: 30" (762mm), 36" (914mm), 42" (1067mm), 48" (1219mm), and 60" (1524mm)
- Textured, injection-molded ABS door equipped with specially designed weights; allows you to open and close door effortlessly from seated position
- Lock plugs (black finish): shipped standard with keyed lock at the bottom and full-width interlock on the top; keying options are keyed-alike or master-keyed

Note **OneTouch shelf and overhead storage units attach to two-high upper post structures only.**

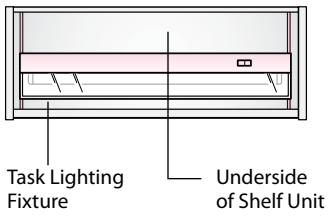
Adaptable Task Lighting



LUTS

Adaptable Components task lights can be mounted below regular depth shelves, overhead storage units, countertops, and vertical storage unit shelves. Their acrylic lenses provide a prismatic light distribution with an optional batwing lens. Lights are shipped standard with low mercury content T8 fluorescent lamps which have a 20,000 hour rated life. All lights utilize electronic ballasts which are energy efficient, provide greater light output, and operate at a lower temperature — reducing energy consumption up to 40%.

Mounted Tasklight



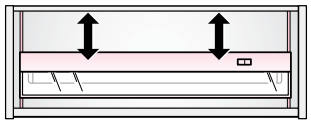
Task Light Options

Undershelf task lights are mounted below adaptable overhead storage units and shelves and OneTouch overhead storage units. They are designed to illuminate worksurfaces and other task-oriented areas.

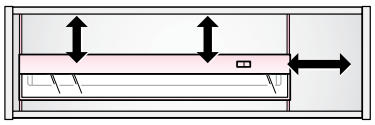
Task lights can be mounted under countertops to illuminate the worksurface below the countertop. Specify a task light that's one (1) size smaller than the countertop's width. The countertop must be shifted 1" off-center towards the side the light is attached to.

Task lights are shipped with a 6' (1829mm) power cord installed on the fixture's right-hand side; the cord can be field-retrofitted to a left-hand orientation on 42" and 54" lights. An optional 9' (2743mm) cord is available. Chicago Electrical code lights are also available.

Front-to-Back Adjustment



Front-to-back and Side-to-Side Adjustment



Undershelf Task Light Mounting

Undershelf task lights are shipped with mounting brackets for installation under regular-depth shelf units. Task lights can be the same width as or narrower than the supporting unit:

- On equal-width units, brackets allow front-to-back fixture adjustment
- On narrower-width units, brackets allow both front-to-back and side-to-side fixture adjustment
- Task light is flush to underside of adaptable regular-depth shelf or overhead storage unit
- Does not protrude below mounted surface.

Adaptable Components, Fixed-Intensity, Electronic Ballast: LUTS Series

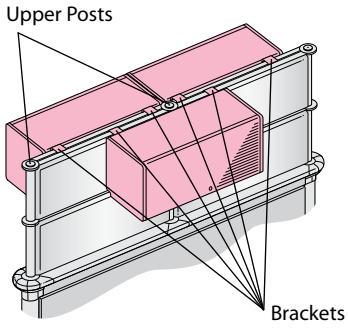
NOMINAL SIZE	ACTUAL SIZE	LAMP	WATTS	POWER FACTOR	STANDARD BALLAST	STANDARD LENS
24" (610mm)	19" (483mm)	3500K 13W T8*, 18 (457mm) long	13	Normal (>.5)	Electronic	Prismatic
30" (762mm)	25" (635mm)	3500K 17W T8*, 24 (610mm) long	17	Normal (>.5)	Electronic	Prismatic
42" (1067mm)	37" (940mm)	3500K 25W T8*, 36 (914mm) long	25	Normal (>.5)	Electronic	Prismatic
54" (1372mm)	49" (1245mm)	3500K 32W T8*, 48 (1219mm) long	32	Normal (>.5)	Electronic	Prismatic

* Only T8 Tri-Phosphor Octic lamps can be used.

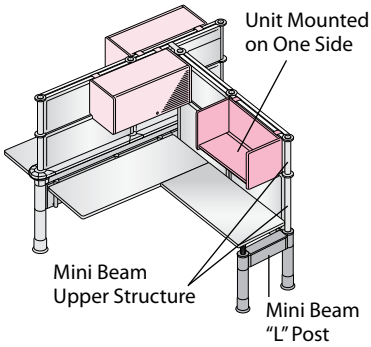
Note **A task light may be of equal or less width than the unit to which it is attached, but may not span across adjacent units.**

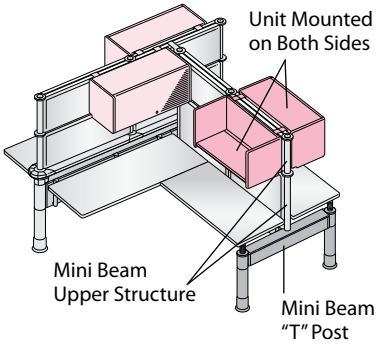
Upper Storage: Planning Guidelines

RACE standard and OneTouch shelf units and overhead storage units attach to the top of the horizontal rail of the upper structure in an off-modular manner. These units can be installed between upper structure posts, or they can span across a post. They can also be installed side-by-side on the same side of a rail, or back-to-back on opposite sides of a two-high upper post structure.

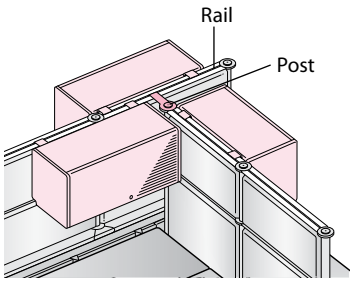


Note **When spanning across upper posts, allow clearance for the two metal brackets that attach the components to the top rail.**

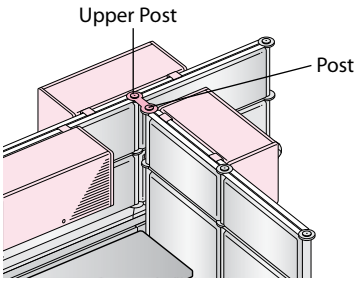




Note **When mounting overhead storage units to a mini beam upper structure, adhere to the following support guidelines:**
- **use an "L" mini beam post when the unit is mounted on one side of the mini beam.**
- **use a "T" mini beam post when units are mounted on both sides of the mini beam.**



Mini Beam Post-to-Rail Tie Bar



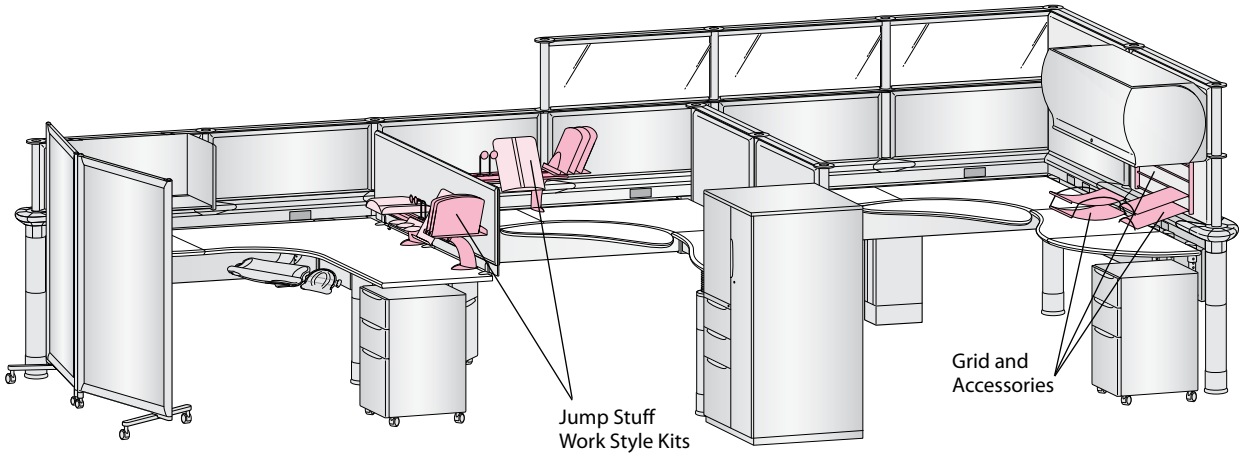
Mini Beam Post-to-Upper Post Tie Bar

Note **For maximum stability, specify the mini beam post-to-rail tie bar or mini beam post-to-upper post tie bar to connect the mini beam upper structure to the main beam upper structure.**

Notes
- **Refer to the Product Application Guidelines section for details on RACE horizontal support and load guidelines applying to main beam and mini beam loaded conditions.**
- **Refer to the Product Application Guidelines section for vertical planning ideas and component dimensional clearances.**

Accessories

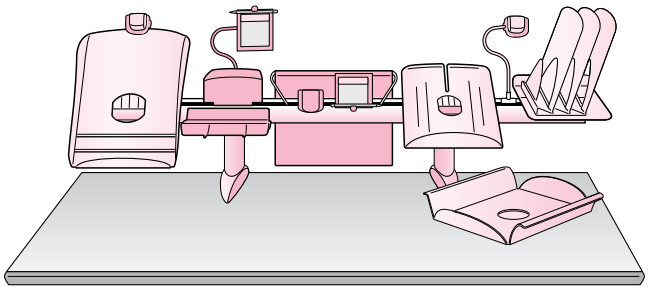
RACE offers accessories that place work tools and lighting within easy reach.



Jump Stuff Work Style Kits

Jump Stuff is a complete line of work tools and lighting. Jump Stuff work tools include a 2-way tray, 2-way display, 3-layer tray, catch-all tray, paper sorter, personal shelf, file frame, phone caddy, sketch pad kit, disc box, and more.

Task Master Kit



Tip **Jump Stuff mount rails can be specified to attach to worksurfaces; they can also be used as freestanding elements.**

Notes

- **Jump Stuff worksurface-attached stanchions do not mount to worksurface edges that are adjacent to main beams or mini beams installed with upper structures.**
- **See Price List for information on available Jump Stuff Lighting and work tools.**

Coat Hook

Need a place to hang your coat or hat? The RACE coat hook attaches at any point along the upper structure's rail.

Grid and Accessories

The RACE grid and accessories products offer organized, immediate access to frequently-used work tools and reference materials. The grid and accessories system consists of the following components:

Grid

- Height: 14" (356mm)
- Widths: 36" (914mm), 48" (1219mm), and 60" (1524mm)
- Depth: 1¼" (32mm)
- Attaches to the upper structure rail
- Horizontal rods accept optional accessories that hang on rods
- Mounting channels at either end will conceal a task light power cord extending from the shelf bottom to the top of the beam

Reference Tray

- Available as a grid-mounted accessory only
- Sloped, sturdy tray surface supports books as large as 10¾" (273mm) x 13" (330mm)
- Raised front edge on tray prevents slippage of reference material

Mailbox

- Available as a grid-mounted accessory only
- Includes two concave metal trays
- 12½" (318mm) wide; 10¾" (273mm) deep

Diskette Bin

- Accommodates most types of computer data storage media
- Removes easily from grid for placement in secure storage

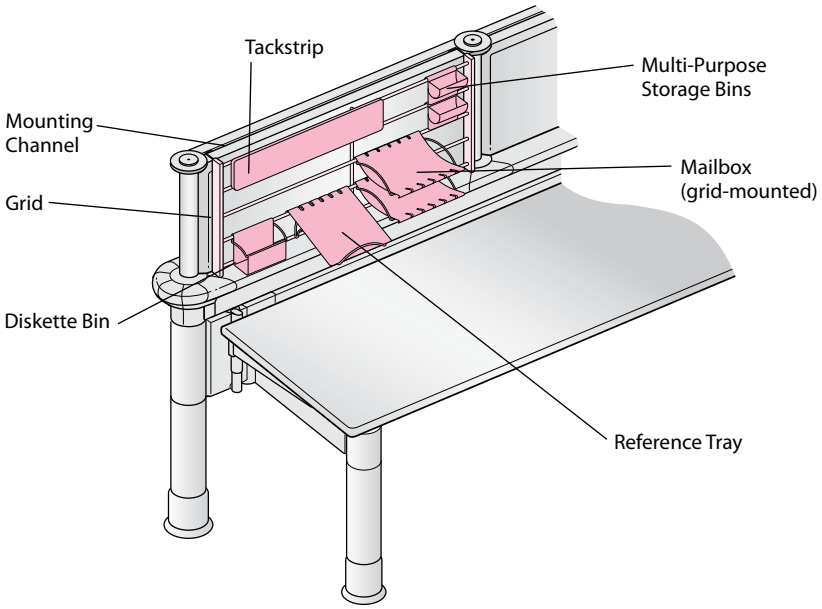
Grid and Accessories

Multi-Purpose Storage Bin

- Available as a grid-mounted accessory only
- Designed to hold writing instruments and a variety of paper fasteners
- Available in two widths: 4" (102mm) and 8" (203mm)

Grid Tackstrip

- Mounts anywhere between any two horizontal grid rods
- Available in two widths: 24" (610mm) and 30" (762mm)
- 3½" (89mm) high



Notes

- **Grid widths can match widths of acoustic/tackable pads; pads will accept any width of grids.**
- **Grids can be mounted at a one- or two-high position on the upper structure. They can be mounted below pads, windows, or upper storage.**
- **Grids can span upper structure posts.**
- **Grids cannot be mounted on windows.**

RACE

Product Application

Horizontal Support

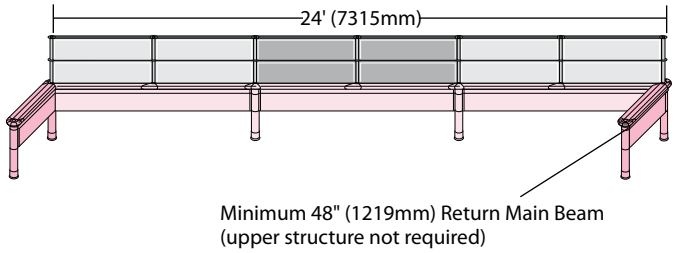
RACE main beam runs require return main beams, main beam stabilizers, and/or mini beams for proper support. The required type of support depends on unloaded or loaded beam conditions.

Main beam stability is normally derived from other main beams or mini beams mounted at a 90° angle. Main beam layouts having unloaded conditions (without components) are typically used with freestanding furniture. Main beam stabilizers can also be used with main beams as support methods. Stabilizers can be used in one of two ways: in conjunction with main beams for support applications (one- and two-sided), or as the sole support application (two-sided).

Unloaded Conditions: Main Beam Support

Main Beams With Two-High Upper Structure: Without Components (One-Sided)

An unloaded run of main beams can span up to 24' (7315mm) with perpendicular support at each end with a **minimum** 48" (1219mm) main beam return.



Notes

- **Main beam stabilizers cannot attach to the universal post.**
- **Exact placement of main beam stabilizers will vary depending upon your worksurface configuration.**

Tips

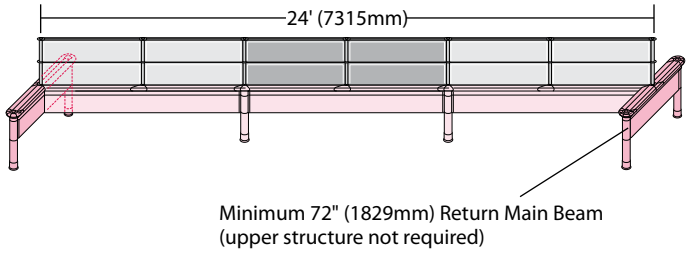
- **60" (1524mm) mini beams may also be used instead of the 48" (1219mm) main beam returns.**
- **When stacking three-high pads, the main beam run must be supported every 15' (4572mm) with a minimum 48" (1219mm) return main beam.**

Horizontal Support

Unloaded Conditions: Main Beam Support

Main Beams With Two-High Upper Structure: Without Components (Two-Sided)

An unloaded run of main beams can span up to 24' (7315mm) when both ends have perpendicular support of a **minimum** 72" (1829mm) return main beam (mid-point connection).

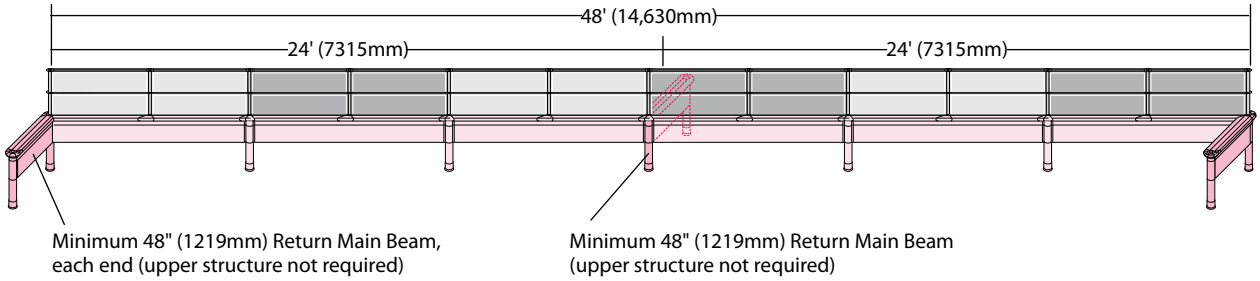


Tips

- **Two 36" (914mm) return main beams can be used instead of one 72" (1829mm) return main beam. This illustration depicts a 72" (1829mm) return main beam connected at mid-point to the main beam run.**
- **60" (1524mm) mini beams may also be used instead of 36" (914mm) main beam returns.**

Main Beams With Two-High Upper Structure: Long Runs Without Components (Two-Sided)

Long beam runs require staggered support every 24' (7315mm). Use a minimum 48" (1219mm) return main beam at each end and staggered **minimum** 48" (1219mm) return main beams between the ends.



Note **Long runs of beams on uneven floors may hinder leveling of the system.**

Tip **The single return main beam on the opposite side of the main beam run can be attached at a main beam mid-point connection or 3-Way (90°) intersection.**

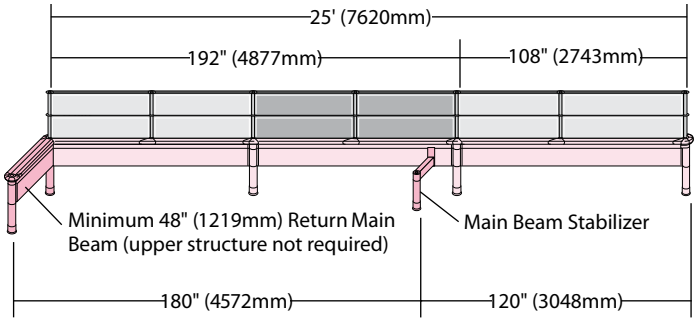
Horizontal Support

Unloaded Conditions: Main Beam Stabilizer Support

Main beam stabilizers can also be used to support unloaded main beam runs. Main beam stabilizers mount at any point along the main beam mounting channel, but cannot attach to the universal post.

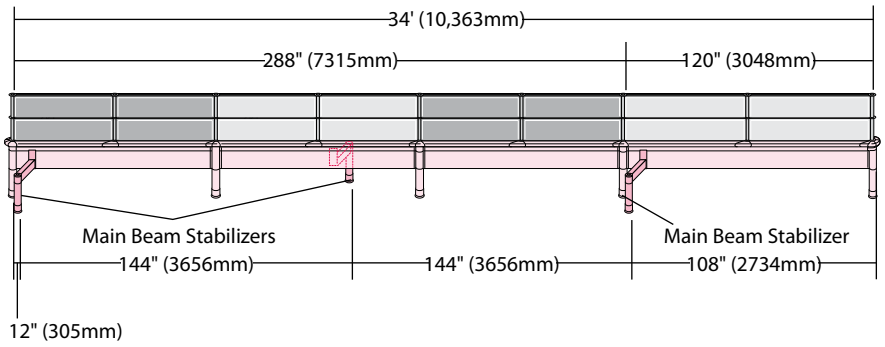
Main Beams With Stabilizer and Two-High Upper Structure: Without Components (One-Sided)

One beam end requires a minimum 48" (1219mm) return main beam. A main beam stabilizer must be within 15' (4572mm) of the initial return main beam. Internal stabilizer support is placed within 15' of a return beam or other stabilizers. A main beam stabilizer must also be within 10' of the end of beam run.



Main Beams With Stabilizers and Two-High Upper Structure: Without Components (Two-Sided)

Each end of run requires a main beam stabilizer within 10' (3048mm) of the beam end. Internal stabilizer support is staggered every 12' (3658mm) along the main beam run.



Horizontal Support

Loaded Conditions: Main Beam & Main Beam Stabilizer: Worksurfaces Only

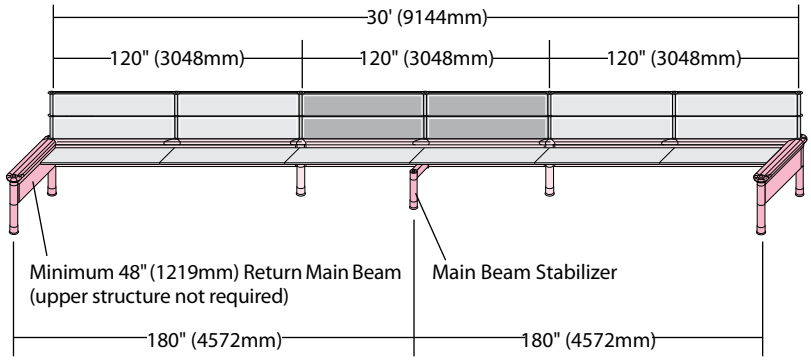
Main beam stabilizers can be added to main beam runs to support long runs of main beam worksurfaces. They provide direct support to the worksurfaces when used with the optional worksurface support kit.

Main beam stabilizers are compatible with both 24" (610mm)- and 28" (711mm)-deep main beam worksurfaces. They are intended to work in conjunction with cantilever brackets and other types of worksurface support brackets, but not as a replacement for them.

Note **Exact placement of main beam stabilizers will vary depending upon your worksurface configuration.**

Main Beams With Stabilizers and Two-High Upper Structure: Worksurfaces Only (One-Sided)

Each beam end requires a **minimum** 48" (1219mm) return main beam. Internal stabilizer support is placed within 15' (4572mm) of a return beam or other stabilizers along the main beam run.



Tips

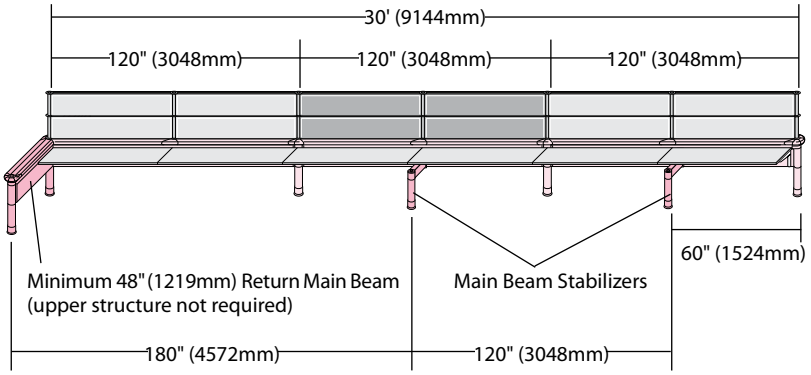
- **Heavy equipment — such as photocopiers — placed on the worksurface should be supported by a main beam stabilizer with a worksurface support kit placed directly under the worksurface.**
- **Suspended pedestals may be installed within 72" (1829mm) of a main beam return. If other attachment locations are desired, they must be adjacent to a main beam stabilizer with a worksurface support kit.**

Horizontal Support

Loaded Conditions: Main Beam & Main Beam Stabilizer: Worksurfaces Only

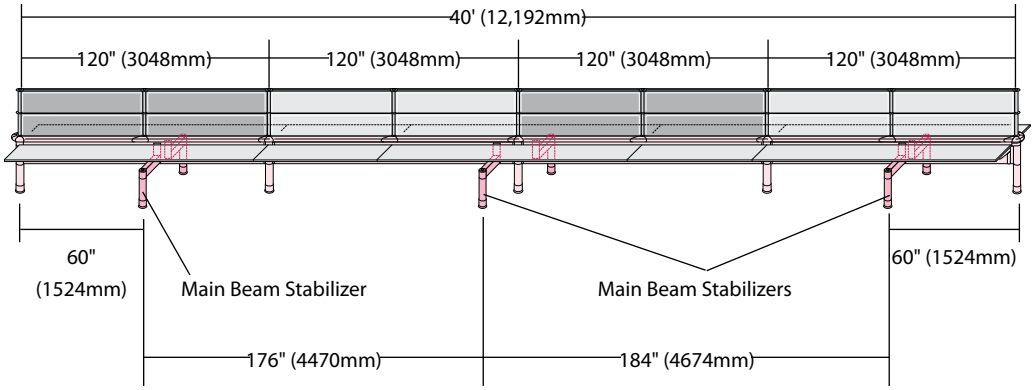
Main Beams With Stabilizers and Two-High Upper Structure: Worksurfaces Only (One-Sided)

One beam end requires a minimum 48" (1219mm) return beam with upper structure. The other beam end can be supported by a main beam stabilizer with a worksurface support kit within 15' (4572mm) of beam end. Internal stabilizer support is placed within 12' of a return beam or other stabilizers.



Main Beams With Stabilizers and Two-High Upper Structure: Worksurfaces Only (Two-Sided)

Each end of beam run requires a main beam stabilizer on both sides within 5' (1524mm) of each end of run. Internal stabilizer support is required on both sides every 15' (4572mm) along the main beam run. Beam runs less than 10' require a minimum of three stabilizers staggered from side-to-side along the length of the beam.



Notes

- **Do not specify suspended pedestals when using main beam stabilizers as the sole support method of a main beam run.**
- **When supporting main beam with stabilizer only — pedestals must be fixed or mobile.**

Tip **Because main beam stabilizers cannot be attached to the universal post, exact placements may vary slightly.**

Horizontal Support

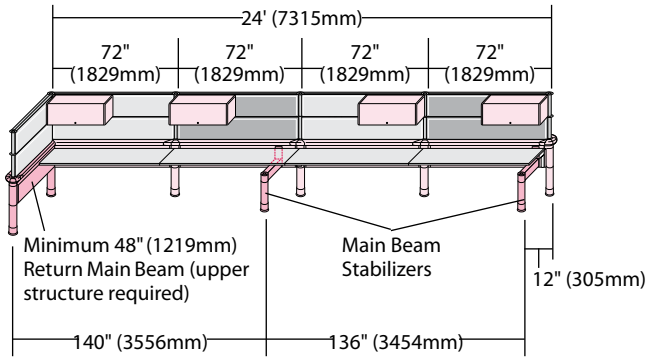
Loaded Conditions: Worksurfaces and Upper Storage

Main beam stabilizers can be added to main beam runs to support long runs of main beam worksurfaces and upper storage components. They provide extra lateral stability to the main beam run and direct support to the worksurfaces when used with the optional worksurface support kit.

Main beam stabilizers are compatible with both 24" (610mm)- and 28" (711mm)-deep main beam worksurfaces. They are intended to work in conjunction with cantilever brackets and other types of worksurface support brackets, but not as a replacement for them.

Main Beams With Stabilizers and Two-High Upper Structure: Worksurfaces and Upper Storage (One-Sided)

One beam end requires a minimum 48" (1219mm) return main beam with upper structure. The other beam end can be supported by a main beam stabilizer with a worksurface support kit or a main beam with upper structure. Internal stabilizer support is placed within 12' of a return beam or other stabilizers.



Notes

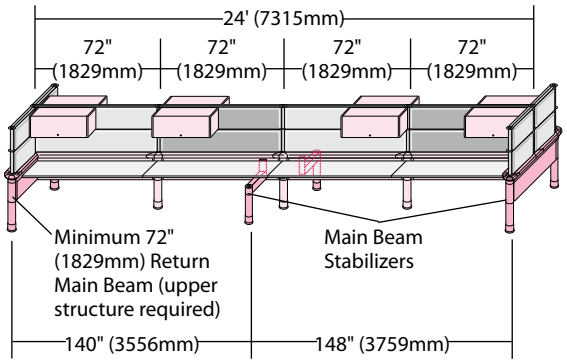
- **Exact placement of main beam stabilizers will vary depending upon your component configuration.**
- **Main beam stabilizers cannot be used as the sole support method when overhead storage units are specified.**
- **When using main beams along with main beam stabilizers with overhead storage units, Haworth requires specifying worksurface support kits.**

Tips

- **Overhead storage units cannot be double stacked.**
- **Suspended pedestals may be installed within 72" (1829mm) of a main beam return. If other attachment locations are desired, they must be adjacent to a main beam stabilizer with a worksurface support kit.**

Main Beams With Stabilizers and Two-High Upper Structure: Worksurfaces and Upper Storage (Two-Sided)

Each beam end requires a minimum 72" (1829mm) return main beam (mid-point connection) with upper structure. Internal stabilizer support is required on both sides every 12' (3658mm) along the main beam run.



Tips

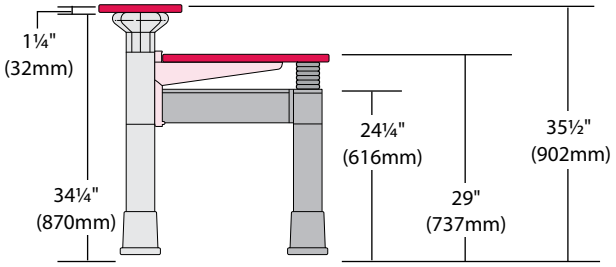
- **Two 36" (914mm) return main beams with upper structure can be used instead of one 72" (1829mm) main beam.**
- **60" (1524mm) mini beams with upper structure may also be used instead of 36" (914mm) main beam returns. When using overhead components, the post-to-rail or rail-to-upper post tie bars are recommended.**
- **Because main beam stabilizers cannot be attached to the universal post, exact placements may vary slightly.**

Vertical Planning

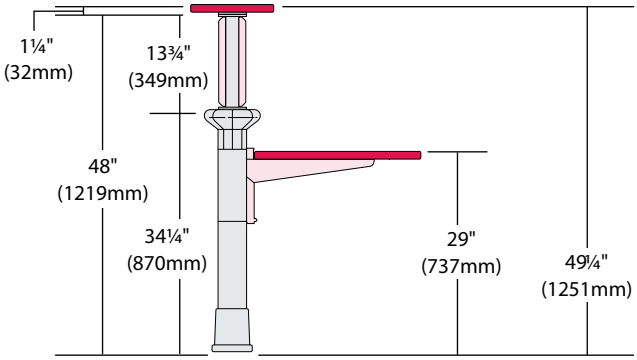
The illustrations in this section show some typical component configurations and their vertical space requirements. These examples are subject to the conditions of support guidelines covered in the Horizontal Support section.

Main Beam Applications

- Countertop supported by a universal post; worksurface supported by main beam cantilever brackets and main beam stabilizer with worksurface support kit (for supporting heavy loads on worksurfaces)



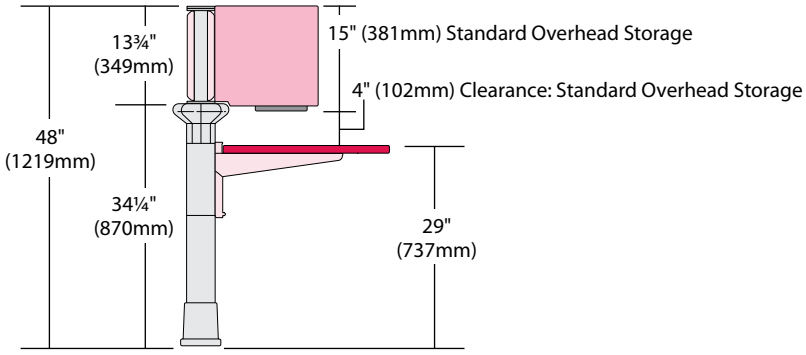
- Countertop supported by one-high upper structure with pads; worksurface supported by main beam cantilever brackets



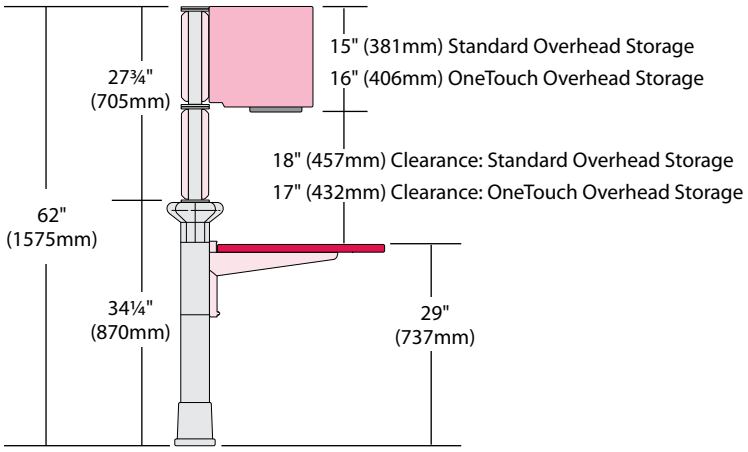
Vertical Planning

Main Beam Applications, continued

- One-high upper structure with pads and standard overhead storage unit supported by universal post and main beam; worksurface supported by main beam cantilever brackets



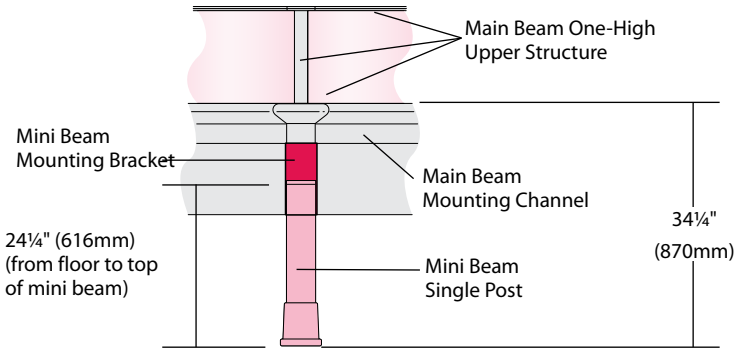
- Two-high upper structure posts; two-high upper structure with pads and standard overhead storage unit supported by universal post and main beam; worksurface supported by main beam cantilever brackets



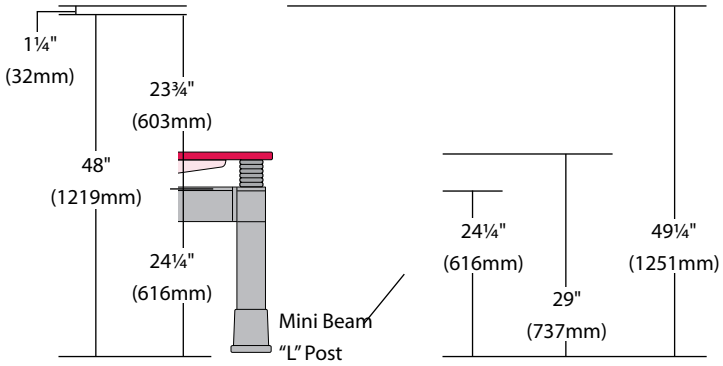
Vertical Planning

Mini Beam Applications

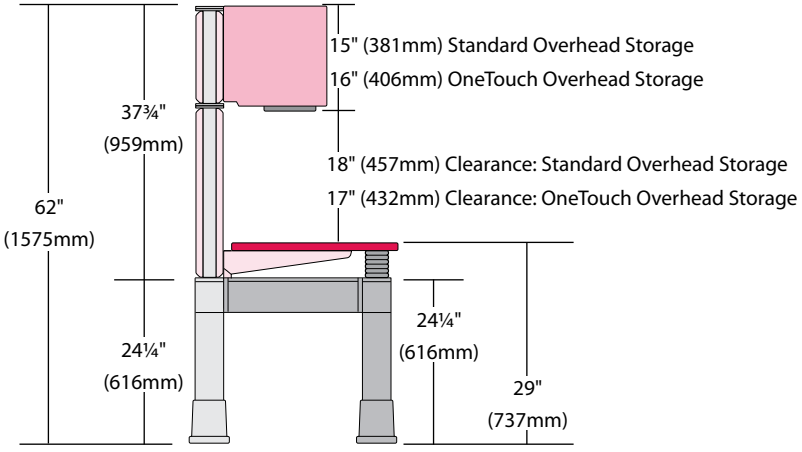
- Illustration depicts an elevation view of a main beam, with a mini beam (with single post) mounted perpendicularly to the main beam



- One-high upper structure with pads supported by mini beam; counter top supported by one-high upper structure; worksurface supported by mini beam cantilever brackets and a mini beam "L" post with worksurface support kit



- Two-high upper structure with pads and standard overhead storage unit supported by mini beam; worksurface supported by mini beam cantilever brackets and mini beam "L" post with worksurface support kit



Power & Cable Management

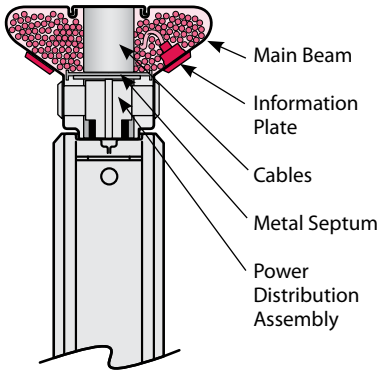
Power Management

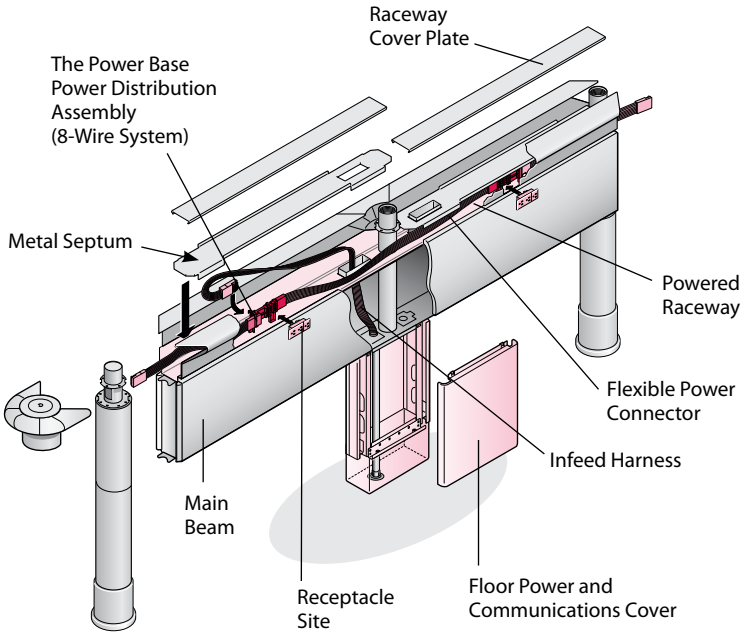
The RACE system accommodates all power management needs through The Power Base™ electrical distribution system.

The Power Base Electrical Distribution System

The Power Base is a pre-wired, factory-installed electrical distribution system available in the RACE main beam raceway. The Power Base Three-Circuit option, available in RACE, offers these features:

- 3 separate 20-amp (15 amps in Canada) rated circuits from one power feed module
- 8-wire system enclosed in one power distribution assembly
  - 3 hot wires
  - 3 neutral wires
  - 1 common ground wire
  - 1 isolated ground wire
- Separate neutrals — one dedicated to each circuit — are capable of carrying computer-quality power
- Worksurface-height receptacle sites:
  - one on each side of 36" (914mm)-wide main beams
  - two on each side of 48" (1219mm)-, 60" (1524mm)-, and 72" (1829mm)-wide main beams
  - three on each side of 84" (2143mm)-wide main beams
  - four on each side of 96" (2438mm)-, 108" (2743mm)-, and 120" (3048mm)-wide main beams





Tips

- **Hot wires carry electrical current from the power source to the equipment.**
- **Neutral wires are always used with hot wires to complete a circuit, carrying electrical current back to the power source.**
- **A common ground wire is attached to the earth through a ground rod.**
- **An isolated ground wire is electrically and mechanically separated from the common ground until connected to the ground rod.**
- **All circuits can access either common or isolated grounds.**

Note **For details on RACE cable management solutions, see Cable Management pages in this section.**

Power Management

- Multiple power sources can be used to provide additional power quality for a particular type of load. For example, special surge protection or uninterruptible power supply (U.P.S.) equipment can be used to supply power to all computer-type loads
- Power distribution from the building to the main beam through:
  - infeed entry from the floor
  - infeed entry from the ceiling
  - infeed entry from the wall
- Power distribution from main beam to main beam through:
  - flexible power connectors for beam-to-beam connection
  - pass-through harnesses to continue power through non-powered beams
- Power access from main beam power distribution to electrical equipment through six different triplex electrical receptacle combinations
- Routing of communication cables through a separate, divided pathway; for details, refer to the Cable Management section

Multiple Harness Capabilities

The RACE main beam's electrical raceway has enough capacity to carry up to four (4) harnesses/12 circuits of computer-quality power. Multiple harnesses may be used:

- To reduce the number of required power entry locations, or
- For different types of power sources

Refer to Multiple Harnesses and Raised Floor Infeed in this section for more details.

Alternative Power Distribution Solutions

Hardwired Installations

Note **Refer to Alternative Power Distribution Solutions in this section.**

Chicago Electrical

Note **Refer to Alternative Power Distribution Solutions in this section.**

New York City Electrical

Note **Refer to Alternative Power Distribution Solutions in this section.**

Power Distribution: Overview

RACE Power Base electrical components are designed to address four power distribution functions: building power-to-main beam, power within the main beam, power from main beam-to-main beam, and main beam power-to-electrical equipment.

Power Distribution: Building Power-to-Main Beam

There are three ways of distributing power from the building power source to RACE main beams:

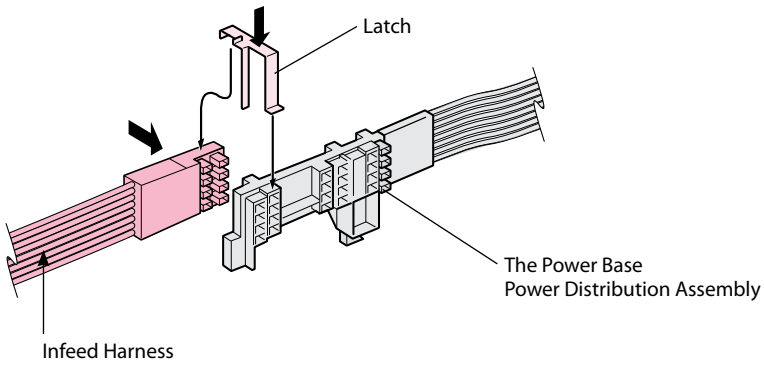
1) using the floor power entry conduit and cover;
2) using the ceiling power entry pole; and
3) using a junction box within a wall or column

With each of these methods, a common, separately-specified RACE infeed harness provides the link between the building power source and the Power Base power distribution assembly mounted inside the RACE main beam.

Infeed Harness

The infeed harness carries power into the powered main beam from a building power source located in the floor, ceiling, or wall/column.

- Separately specified
- Standard length for floor, ceiling or wall/column applications: 12' (3.66 meters)
- Available lengths designed to pass power to main beams installed farther from the building power access point: 30' (9.14 meters) and 50' (15.24 meters)
- One end of harness equipped with plug that connects to the power block on the main beam's Power Base power distribution assembly; harness locks to power block with a latch
- Opposite end of harness is hardwired to the building power source by a licensed electrician



Notes

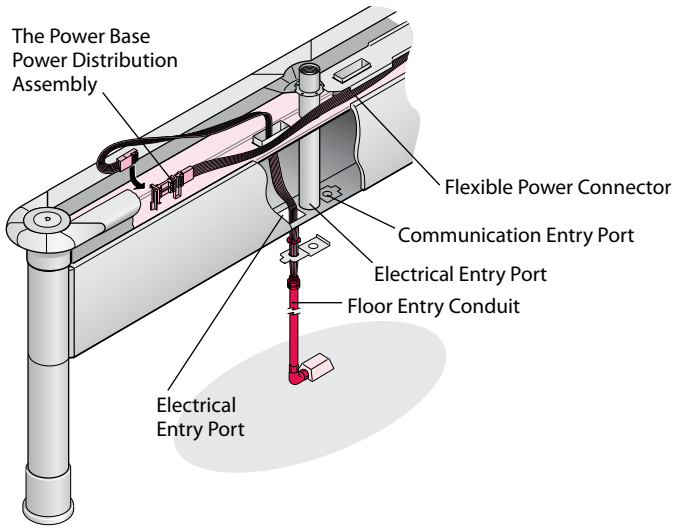
- **Must be used in conjunction with a floor power entry conduit, a ceiling entry power pole, or a wall-mount entry.**
- **Infeed harness(es) can be concealed with a floor power and communications cover.**
- **Refer to the 3-Circuit Power Base Planning Guide for circuit loading, balancing details, and wiring diagrams.**

Power Distribution: Building Power-to-Main Beam

Floor Access: Floor Entry Conduit

This component, consisting of a 72" (1829mm) length of flexible liquid-tight conduit, encloses the separately specified infeed harness.

- Conduit offers the following harness capacity:
  - ½" (13mm) diameter conduit: one infeed harness
  - 1" (25mm) diameter conduit: two infeed harnesses
- Two electrical infeed knockouts, both accepting the ½" (13mm) or 1" (25mm) conduit fitting, are positioned in the bottom of the main beam to allow access for the floor power entry conduit
- Communication cables enter the main beam from the floor through a third opening that has knockouts for ½" (13mm) or 1" (25mm) diameter floor entry conduit



Notes

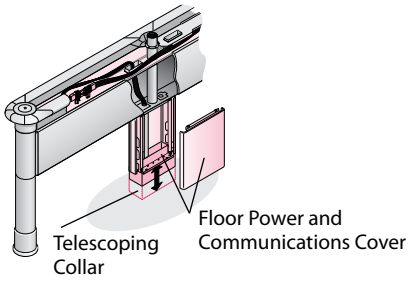
- **Each of the three knockouts in the main beam route infeed harnesses or communication cables up into the beam.**
- **The floor entry conduit entrance point and the floor power communications cover attachment location varies according to the main beam length:**
  - **60" (1524mm)-, 72" (1829mm)-, 96" (2438mm)-, and 120" (3048mm)-long main beams: entry point and attachment is at midpoint**
  - **84" (2134mm)-long main beams: entry point and attachment is 36" (914mm) from one side, and at 48" (1219mm) from the other side**
  - **108" (2743mm)-long main beams: entry point and attachment is 48" (1219mm) from one side, and at 60" (1524mm) from the other side**

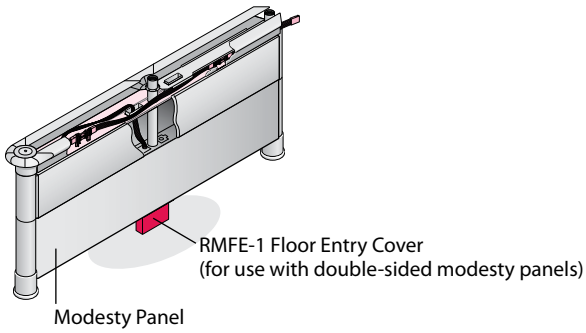
Power Distribution: Building Power-to-Main Beam

Floor Power and Communications Cover

The floor power and communications cover can be specified whenever the building's power or communications source is accessed from the floor. The cover conceals the power entry conduit and communication cables that are routed from the floor to the RACE main beam.

- Cover is typically positioned over the floor power access point; a telescoping collar extends to the floor to conceal the floor access point
- If the cover is not positioned directly over the floor power access point, it may be field-notched to accept entry of conduit from a nearby access point





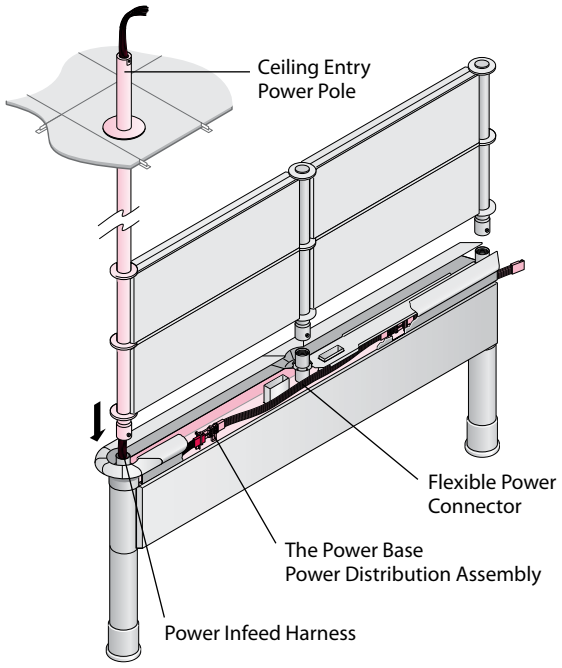
Tip **A floor entry cover (RMFE-1) is used in conjunction with RACE main beams equipped with double-sided modesty panels.**

Power Distribution: Building Power-to-Main Beam

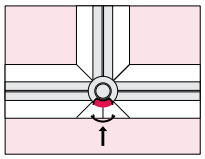
Ceiling Entry Power Pole

The ceiling entry power pole is an enclosed channel that carries and conceals separately specified infeed harnesses from the building power source (located in the ceiling) down to the RACE main beam. It reaches a suspended ceiling that is up to 10' (3.05 meters) high. When used in an upper structure run, the pole replaces an upper post and supports the upper structure rails and pads.

- Height: 96" (2438mm)
- Attaches to the main beam's universal post or to the midpoint junction of main beams 72" (1829mm) long or longer
- Pole's electrical cavity is 2" (51mm) in diameter and can enclose up to two infeed harnesses

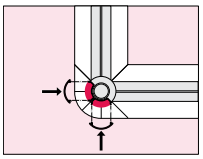


Power Entry



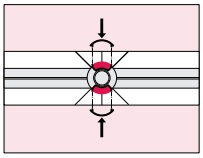
Power entry with one-quarter communications channel

RECE-0045



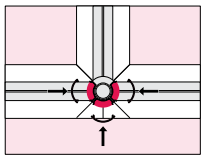
Power entry with one-half communications channel

RECE-0090



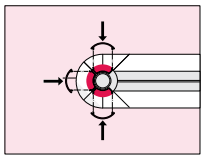
Power entry with split one-half communications channel

RECE-0180



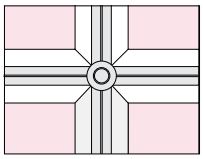
Power entry with three-quarter communications channel

RECE-0270



Power entry with three-quarter communications channel

RECE-0270



Specified whenever no communication channels are required (will replace upper post in any configuration)

RECE-0001

Notes

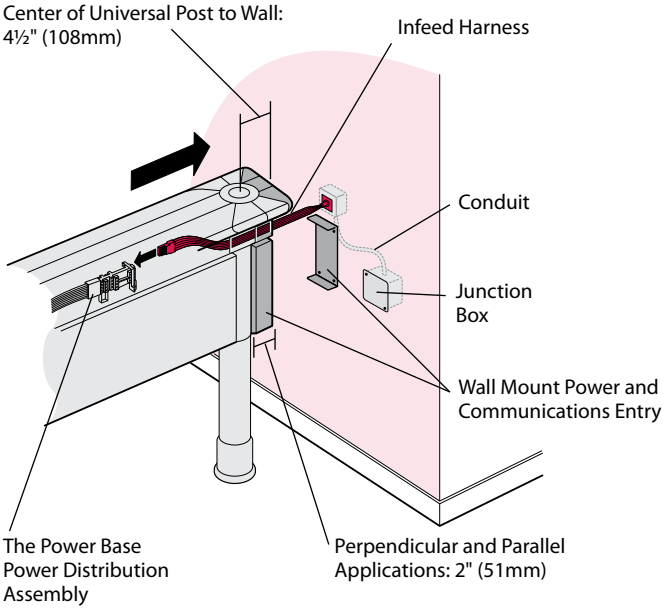
- **Poles are not retrofittable for different upper structure applications.**
- **The ceiling entry power pole can be specified with one, two, or three external (vertical) factory-installed communication segments for routing communication cables. These segments feature full-length, snap-in aluminum covers that form channels for easy cable installation. For details, refer to the Cable Management section.**

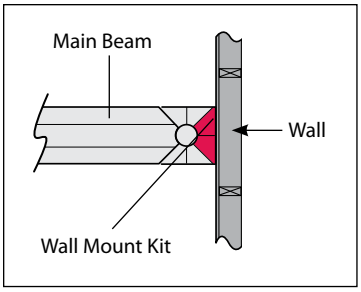
Power Distribution: Building Power-to-Main Beam

Wall Mount Power and Communications Entry

This 2" (51mm)-wide steel beam and raceway section is designed for building power sources accessed from a wall or column. The section allows direct routing of a separately specified infeed harness from a junction box within a building wall or column into a RACE main beam's powered raceway.

- Accommodates 90° connection to wall at main beam end, or parallel connection to wall at beam end, or parallel connection to wall at beam mid-point on beams 72" (1829mm)-long or longer
- An installation template is provided with each wall-mount power and communications entry kit to ensure proper mounting location
- Kit includes attachment hardware
- Infeed harness is hardwired to a junction box within the wall located near the wall-mount entry. A ½" (12mm)- or 1" (25mm)-diameter conduit is required to route the infeed harness from the junction box to the wall-mount entry plate

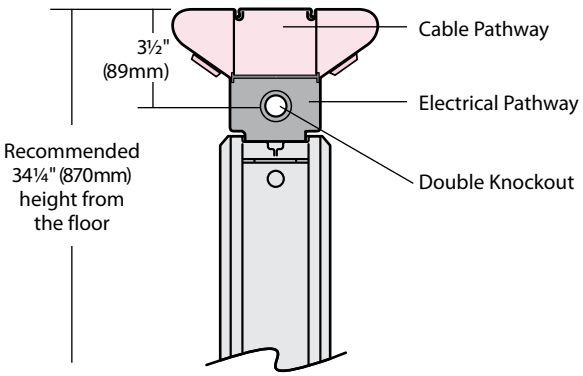




Note **If a mini beam is attached at 90° to the wall mount, there will be interference with a bolt head (modify in field or contact specials).**

Tips

- **½" (13mm) diameter conduit: one infeed harness.**
- **1" (25mm) diameter conduit: two infeed harnesses.**

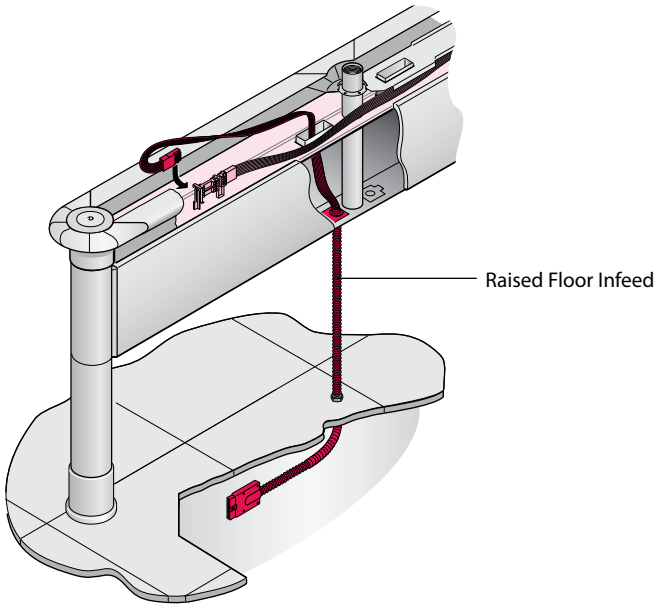


Note **Recommended beam height is 34¼" (870mm) to top of the beam; beam height may vary due to uneven floor conditions. Electrical knockout for conduit is located 3½" (89mm) below the beam height.**

Power Distribution: Building Power-to-Main Beam

Raised Floor Infeed

- Provides 6' (1829mm) and ½" (13mm) diameter liquid-tight vinyl-covered flexible metal conduit to bring power from the Haworth underfloor wiring into the bottom of a powered RACE beam
- Standard in black finish color only
- Available in "single" or "double" feed configurations. Single feed brings one set of three (3) circuits into the RACE beam. Double feed brings two sets of three (3) circuits into the RACE system
- Available in multiple lengths; for details, refer to Price List
- One end of harness equipped with plug that connects to the power block of the main beam's Power Base power distribution assembly
- The opposite end of the assembly has a modular connector, with eight 12-gauge wires for up to three circuits of power in a 3-3-2 wiring configuration to be used with the Haworth underfloor electrical system



Notes

- **This infeed can only be connected to the Haworth underflooring electrical system with a 3-3-2 wiring configuration.**
- **Refer to the Specification Guide for application examples of "single" and "double" feed configurations.**

Tip **Use floor power and communication cover for optional concealment of infeed harness.**

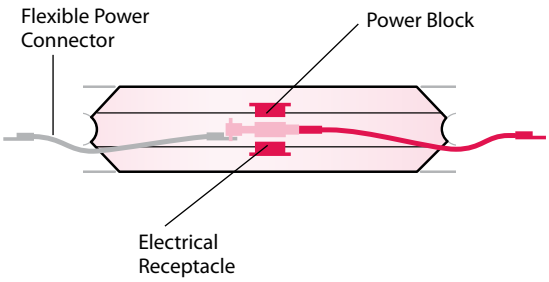
Power Distribution: Within the Main Beam

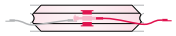
The building's electrical power source is accessed via a power infeed harness from the floor, ceiling, or wall/column. The opposite end of the infeed harness attaches to the RACE Power Base power distribution assembly mounted inside a main beam.

Power Base Power Distribution Assembly

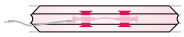
One factory-installed power distribution assembly (PDA) is included with each powered main beam.

- Six PDA lengths are available: 36" (914mm), 48" (1218mm), 60" (1524mm), 72" (1829mm), 96" (2438mm), and 120" (3048mm)
- Provides one, two, three, or four power blocks, depending on the main beam's width. Power blocks are designed to accept a combination of four plug-in connections:
  - two connection sites may be used by either an infeed harness, a flexible power connector, pass-through harness, or an ambient light feed
  - the remaining two connection sites are available for plugging in receptacles, one on each side of the power block
- Number of receptacle plug-in sites depends on the main beam's width; refer to the illustrations below
- Powered main beams also include power connectors designed to continue power into an adjacent powered main beam

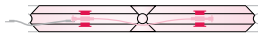




36" (914mm)-long Main Beam

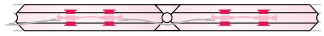


48" (1219mm)- or
60" (1524mm)-long Main Beam

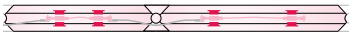


72" (1829mm)-long Main Beam

84" (2134mm)-long Main Beam



96" (2438mm)- or 120" (3048mm)-long Main Beam



108" (2743mm)-long Main Beam

Notes

- **Refer to the Specification Guide for specific planning information for hardwired installations, and Chicago and International electrical standards.**
- **Refer to the Specification Guide for specific beam and access dimensions.**

Retrofit Kits

Retrofit kits convert installed, non-powered main beams into powered main beams. The retrofit kit includes a power distribution assembly (PDA) sized to match the main beam's width, a flexible power connector, and a mounting screw to secure each of the PDA's power blocks to the main beam.

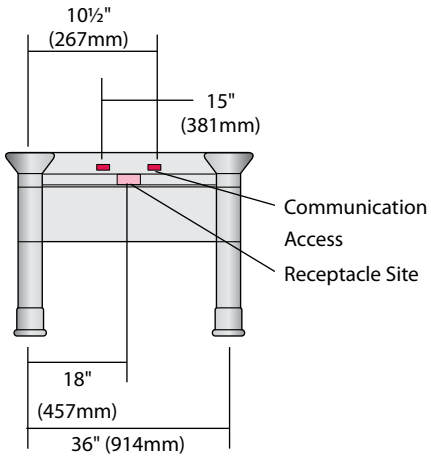
- Retrofit kit lengths: 36" (914mm), 48" (1218mm), 60" (1524mm), 72" (1829mm), 96" (2438mm), and 120" (3048mm)
- Non-powered main beams have covered receptacle locations to accommodate the installation of a retrofit kit and receptacles

Power Distribution: Within the Main Beam

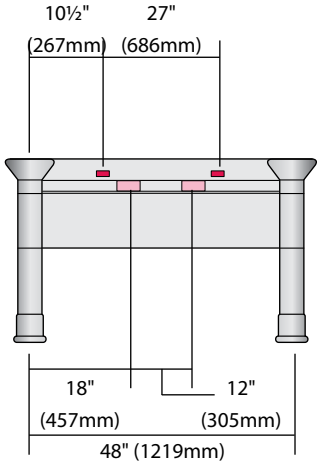
Electrical and Communications Access

The illustrations below and on the following page depict the quantity and dimensional placement of communication and electrical ports located on each side of the main beam, according to each main beam's width.

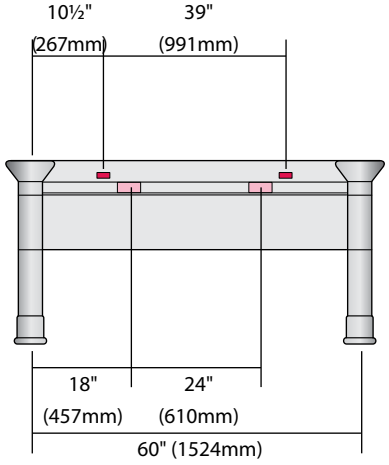
36" (914mm)-long Main Beam



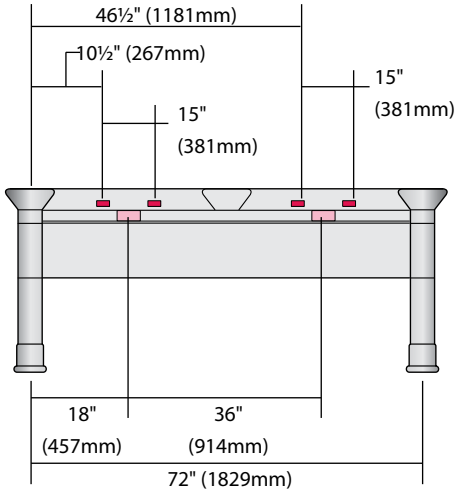
48" (1219mm)-long Main Beam



60" (1524mm)-long Main Beam

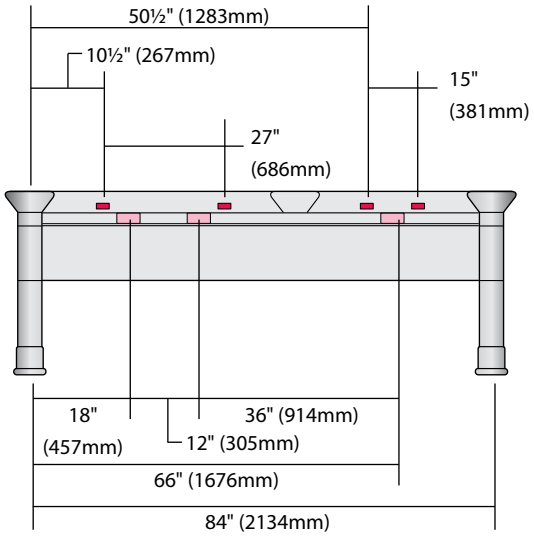


72" (1829mm)-long Main Beam

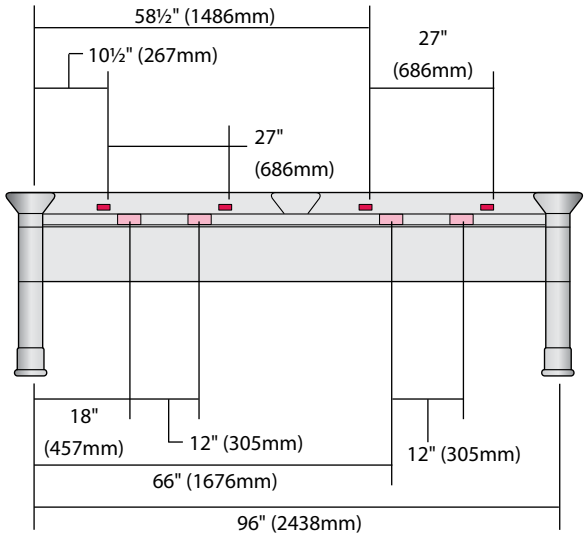


Power Distribution: Within the Main Beam

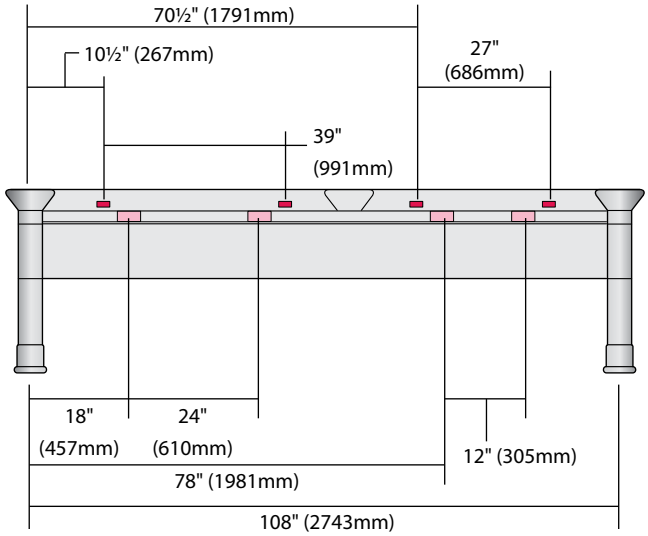
84" (2134mm)-long Main Beam



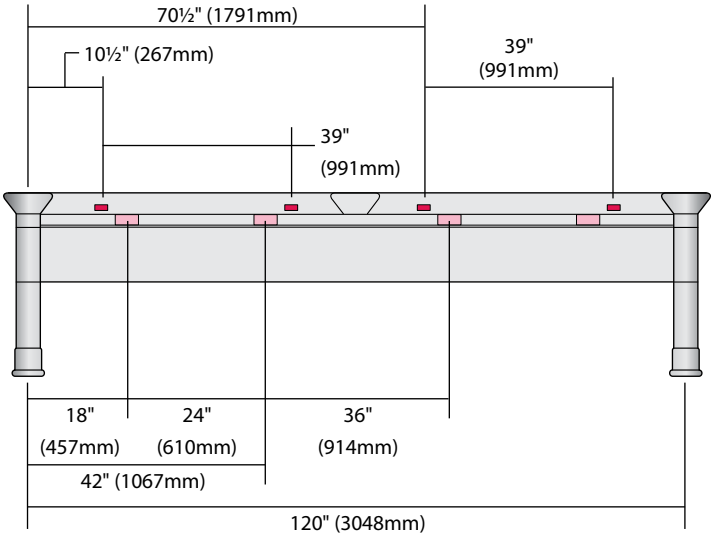
96" (2438mm)-long Main Beam



108" (2743mm)-long Main Beam



120" (3048mm)-long Main Beam



Power Distribution: Main Beam-to-Main Beam

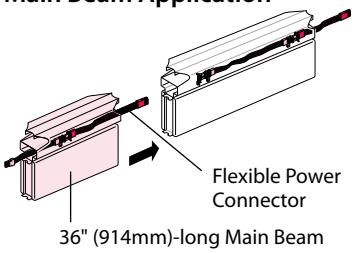
There are two methods of continuing power between adjacent main beams. Flexible power connectors, described below, route power between powered main beams. Pass-through harnesses, covered on the following page, continue power between powered main beams that are separated by non-powered main beams.

Flexible Power Connectors

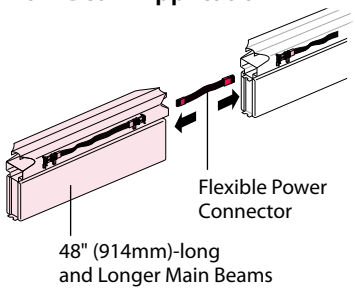
Flexible power connectors join the ends of two main beam power blocks in a straight line configuration, or in 90° angle main beam configurations. They also transfer power between main beam power blocks in three- and four-way main beam connections, and a special application for 72" (1829mm)-long main beams described below.

- One connector is shipped with each powered main beam or retrofit kit
- Connector lengths are determined by the beam length as follows:
  - a 36" (914mm) main beam features a permanently integrated power connector
  - or main beams 48" (1219mm)-long and longer, one 34" (864mm)-long flexible power (RFC-0001) is shipped with each powered main beam
  - the exception is the 72" (1829mm)-long main beam, which is shipped with one 44" (1118mm)-long flexible power connector (RFC-0002). The longer connector length is required when routing power from the end of the 72" (1829mm)-long main beam into an intersecting powered main beam at its mid-point (refer to illustration on the next page).

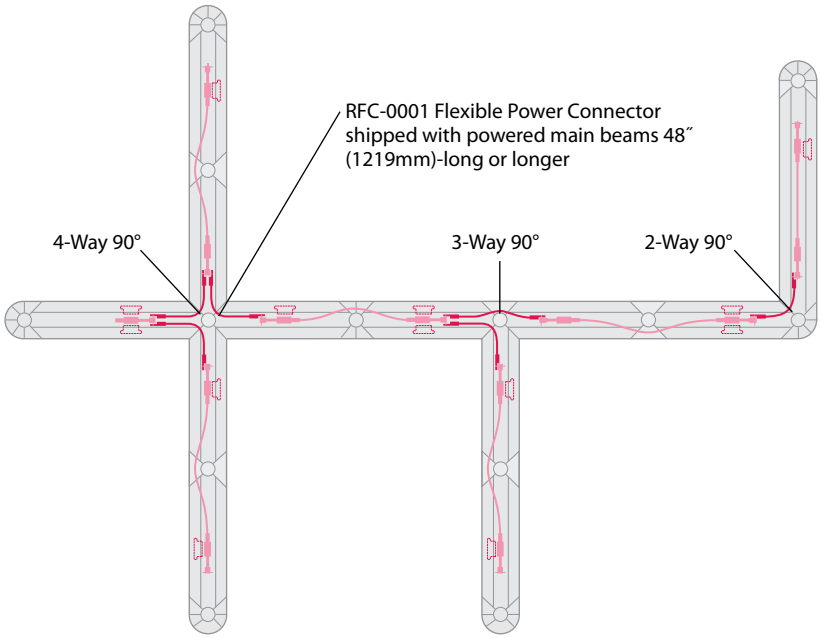
36" (914mm)-long Main Beam Application



48" (1219mm)-long and longer Main Beam Application



Flexible Power Connector Applications

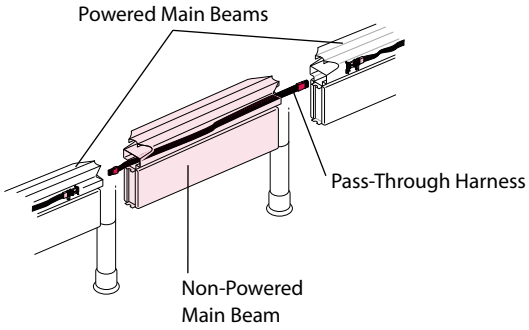


Power Distribution: Main Beam-to-Main Beam

Pass-Through Harnesses

The pass-through harness continues power between powered main beams, when those main beams are separated by non-powered main beam(s).

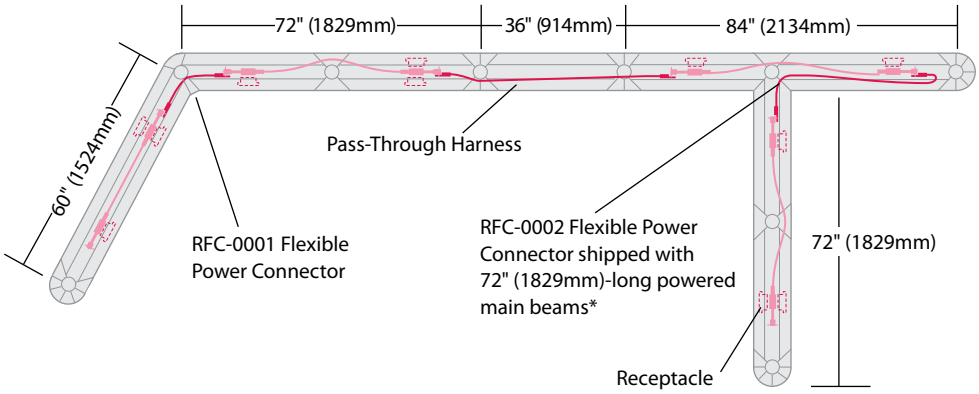
- Lengths: 36" (914mm), 48" (1219mm), 60" (1524), 72" (1829mm), 84" (2134mm), 96" (2438mm), 108" (2743mm), and 120" (3048mm)



Tip **Pass-through harnesses do not offer receptacle access in the non-powered main beam(s) the harness is being routed through.**

Note **The end of a pass-through harness will connect only to a power distribution assembly's power block. It will not connect to the end of another pass-through harness.**

Pass-Through Harness and Flexible Power Connector Applications



* The 10" (254mm) extra length of the RFC-0002 is necessary when connecting another main beam at the mid-point of a 72" (1829mm)-long main beam.

Power Distribution: Main Beam-to-Electrical Equipment

Electrical power contained within the power distribution assembly (PDA) is made accessible for equipment via power receptacles; receptacles plug into the power block on the PDA and are secured to the main beam with two screws.

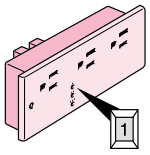
Power Receptacles

All RACE power receptacles are field programmable for assignment to circuit 1, 2, or 3; an indicator window on the receptacle face shows the assigned circuit number. This feature makes it possible for facilities to easily move a receptacle from one furniture location to another, and to change the receptacle circuit from one to another without replacing the receptacle.

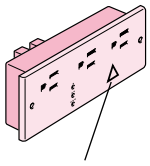
Isolated ground receptacles display an orange triangular indicator logo on their face; common ground receptacles do not have this indicator logo.

The RACE receptacle types are as follows:

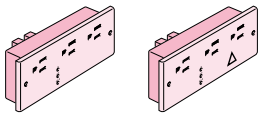
- 15-amp triplex, common ground (RRC-0003): All three outlets connect to a common ground conductor, accessing one circuit
- 15-amp triplex, isolated ground (RRI-0003): All three outlets connect to an isolated ground conductor, accessing one circuit



Field-Programmable Circuit Assignments



Isolated Ground
Indicator Logo



RRC-0003 **RRI-0003**

Notes

- **Refer to the Price List for the hardwire-style receptacle plate that accepts standard hardwired duplex receptacles (NEMA 5-15R or NEMA 5-20R face configurations); these types of receptacles are not provided by Haworth.**
- **Chicago receptacles and steel backer plates are available; refer to the Price List.**
- **Refer to the Specification Guide for specific planning information for hardwired installations, and Chicago and International electrical standards.**

Multiple Harnesses

The RACE main beam electrical raceway has capacity to carry multiple harnesses. This capacity can be applied to:

1) reduce the number of required power entry locations, and
2) use different harnesses for different power sources.

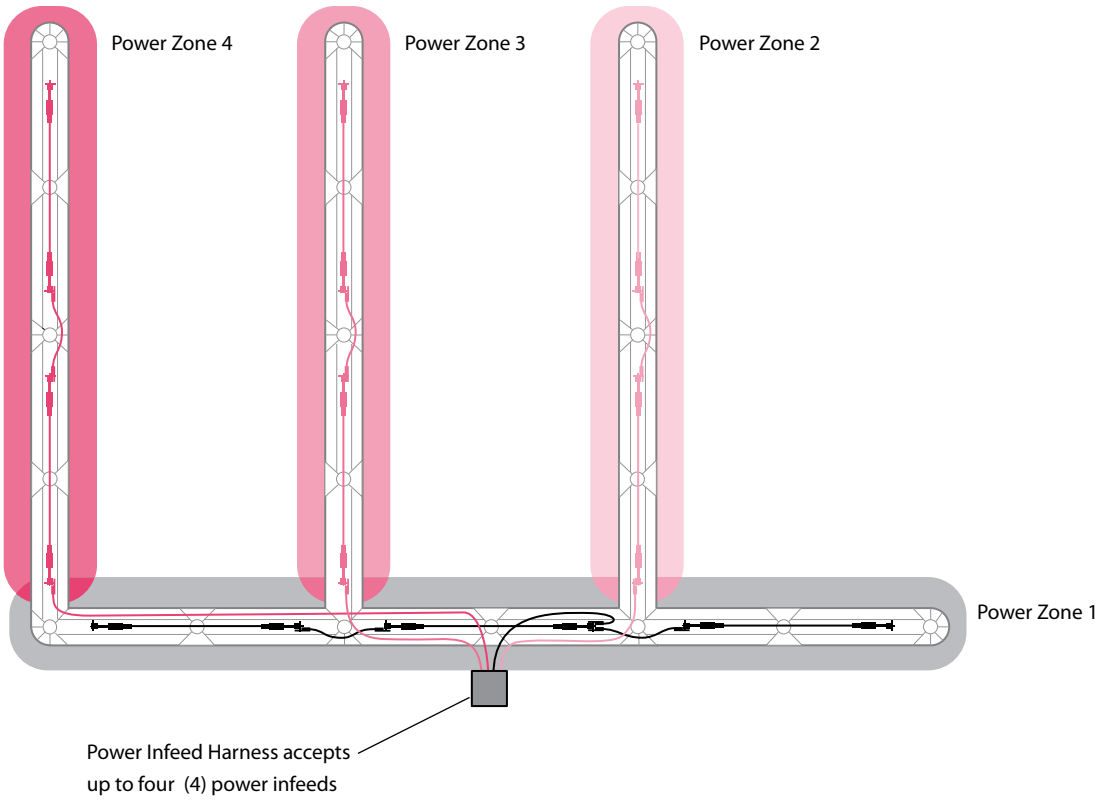
While multiple harnesses can be applied in a variety of ways, Haworth recommends only the method described below. Other methods may cause difficulty in tracking the connections between power sources and harnesses.

Block Method

The block method uses only one set of harnesses to supply a power zone. This technique can reduce the number of required power infeed locations.

In the example below, each main beam is 72" (1829mm) long. The three main beams oriented horizontally are within the Power Zone 1, which is supplied by the standard 12' (3658mm) infeed harness.

The three sets of two beams running vertically are designated as individual zones. Use the appropriate power infeed harness to supply these other power zones from the original infeed location. Up to four infeeds can enter the same location using two 1" (25mm) floor entry conduits.



Notes

- **Tracking power sources to each harness is critical. Do this by color-coding each harness with colored tape. For example, wrap black tape around harnesses on power source 1, and red tape around harnesses on power source 2.**
- **Warning: DO NOT connect any single harness to more than one source of power supply due to risk of fire or electrical shock.**

Power Planning: Overview

Power Base products are listed for use with multiple building power sources. Because each circuit has a separate neutral conductor, the power sources used may be from standard building power or other quality enhanced power systems such as an uninterruptible power supply (U.P.S.).

Circuit Capabilities and Code Restrictions

Each circuit in the Power Base electrical system carries a maximum rated load of 20 amps (15 amps in Canada) of electrical service. However, applicable national and local building and electrical codes may further restrict the current usage of this or any other power distribution system.

- The National Electrical Code (NEC) recommends that a circuit length be limited so that the voltage drop does not exceed 5%.
- The NEC limits the amount of continuous load to 80% of the circuit rating. Therefore, the total amperage drawn from any Power Base circuit should not exceed 16 amps if equipment (computers, lighting fixtures, etc.) is drawing power continuously for three or more hours. Equipment requiring a high initial amperage draw to be activated (paper shredders, laser printers, etc.) should be placed on a circuit limited to a 16-amp capacity. A single circuit may also be dedicated to high-amperage equipment (photocopiers, CAD equipment, etc.).
- The maximum number of receptacles is 13 per circuit. In most cases, circuit loads will exceed maximum before 13 receptacles are used.
- The NEC also states that multiple power sources within a building must use the same grounding electrode and that the ground path have sufficiently low impedance to facilitate the operation of circuit protective devices.

Note **Individual power sources must be connected to the same grounding electrode or a single grounding electrode system. Be sure of ground continuity when using uninterruptible power supplies and isolation transformers.**

Power Planning: Guidelines

Underwriter's Laboratories (UL) limits the length of a RACE main beam run so that the impedance of the ground path does not exceed 1 ohm from the supply connection to the last electrical component (UL 183 sec. 12). This limits the length of RACE main beam runs to fewer than 40 beams (of any size) from the connection point of the power source infeed.

Based on circuit load capacity of 16 usable amps per continuous-use circuit, Haworth recommends that the initial loading on each circuit be approximately 10 amps. This initial planning limitation permits the user to add or change electrical equipment within the guidelines of local amperage limits. If the user immediately allows maximum amperage loading of 16 amps on each circuit, this will restrict the future addition of equipment and may force a redesign of the electrical layout.

Regard local codes carefully, because they may dictate the limit of receptacles allowed on each circuit below the National Code's limit. Within local code guidelines, limit the receptacle installation to the minimum necessary to power the equipment in the current workstation plan. Avoid providing receptacles for projected needs, because surplus receptacle availability may encourage use of unauthorized equipment and lead to electrical overloads.

Notes

- **Local codes may require dedicated circuits for all lighting devices. Remember these requirements for planning lighting on a dedicated circuit:**
  - **Ambient light fixtures plug directly into the main beam power block with the ambient light feed; they do not require a receptacle.**
  - **Indicate the same circuit assignment number for all lighting equipment on your lighting plan.**
- **Haworth recommends using a non-powered beam to create a physical break between power zones. If this is not possible, indicate a power break on your electrical plan (to alert the installing electrician not to install the flexible power connector). (Each flexible power connector has a label warning the installing electrician against connecting powered main beams from two separate infeed harnesses.)**
- **Be sure to create an accurate plan illustrating the electrical layout. To ensure safety and compliance, be sure that your plans are reviewed by an expert in local code requirements and an electrical engineer or licensed electrician.**
- **All circuit plans should be based on the anticipated equipment load, not the maximum number of receptacles allowed. In fact, with most equipment loads, you typically will consume amperage capacity with fewer than 13 receptacles.**
- **The person or group planning and supervising installation of electrical components is responsible for complying with all applicable national and local electrical codes.**
- **Refer to the 3-Circuit Power Base Planning Guide for additional circuit loading and balancing details.**

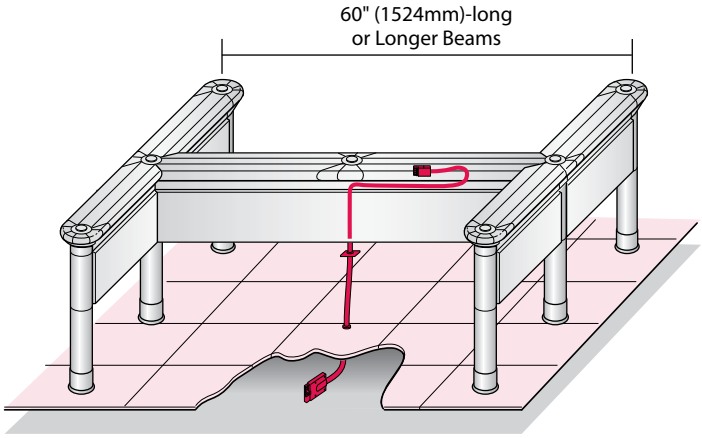
Raised Floor Infeed

Besides the standard single harness application (see example #1), multiple harness applications can also be accomplished with the raised floor infeed.

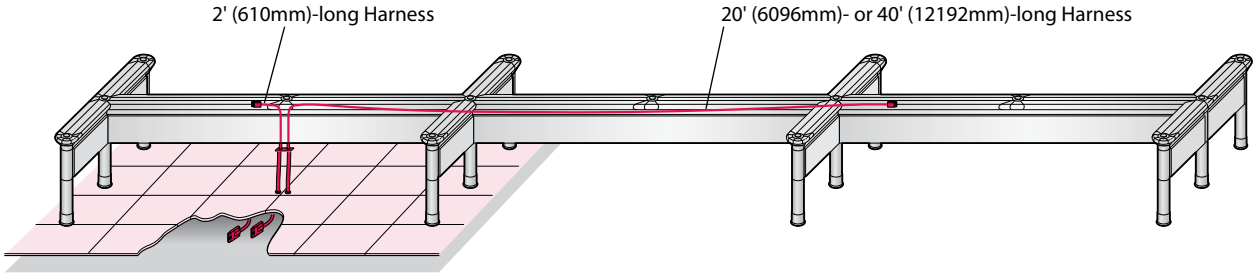
- Infeed harnesses are available in multiple lengths. Refer to the Price List for combinations of lengths.
- Multiple harnesses can be routed through beam lengths of 60" (1524mm) or longer (see example #2).
- When powering a single beam with more than three (3) circuits, you must specify a main beam equal to or greater than 84" (2137mm) long.

Note **The raised floor infeed can only be used with the Haworth 3-3-2 power distribution system.**

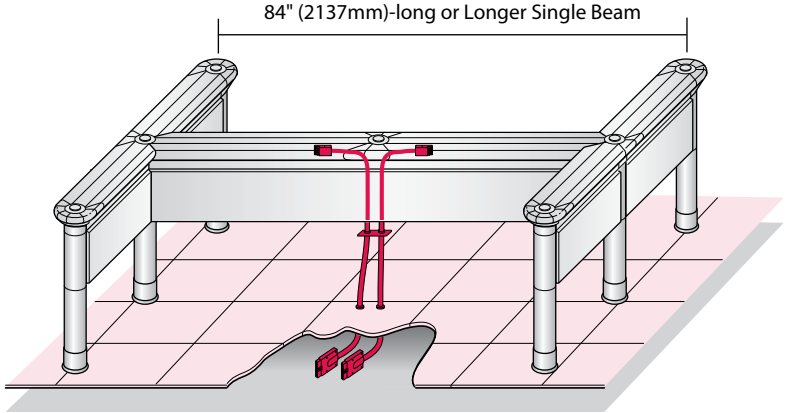
Single Harness Application: Example #1



Double Harness Application: Example #2



Double Harness Application: Example #3



Alternative Power Distribution Solutions

Hardwired Installations

Some local electrical codes (such as Chicago) do not permit the use of modular power distribution systems such as the RACE Power Base. In these locales, power distribution within the beams must be installed under authority of a permit by a contractor licensed and registered in that city using conventional hardwiring.

The electrician must route wires of each branch circuit through the beams. Haworth recommends the following for wiring the beam system:

- Use the standard power feed hardware (floor entry conduit, ceiling entry power pole, and wall mount power and communications cover) to route wire from the building into the beams.
- Use a standard duplex receptacle (NEMA 5-15R or NEMA 5-20R) to access power at the workstation, or use receptacles with steel backer plate (refer to Price List).
- Use the available receptacle-mounting plate to mount a receptacle. This plate is mounted to the side of the beam in place of the blank cover plate. Refer to the Price List for appropriate cover plate.

Hardwired applications can also be used to satisfy special electrical needs in conjunction with The Power Base system. For example, a circuit may be routed through the beams to provide outlets for emergency lighting.

Other wiring devices may include a twist-lock receptacle or light switch. Consult your Haworth Sales Engineer for these types of applications.

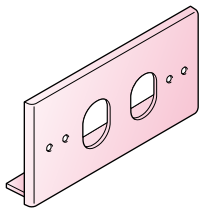
Chicago Electrical

- Specify Chicago (non-powered) main beam for hardwiring by a licensed electrician.
- Use a receptacle mounting plate to mount a receptacle. When no receptacles are needed, order a steel cover plate; refer to the Price List.
- For routing communication cables through the RACE beam to the communication pathway, use separately specified metal cable chimneys; refer to the Price List.

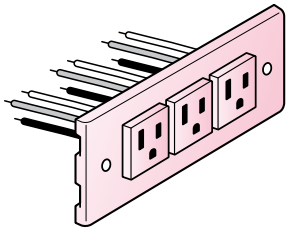
New York City Electrical

- Local electrical codes may require ordering electrical components separately.
- Follow local codes when specifying electrical components.

Receptacle Mounting Plate



Steel Cover Plate



Cable Management

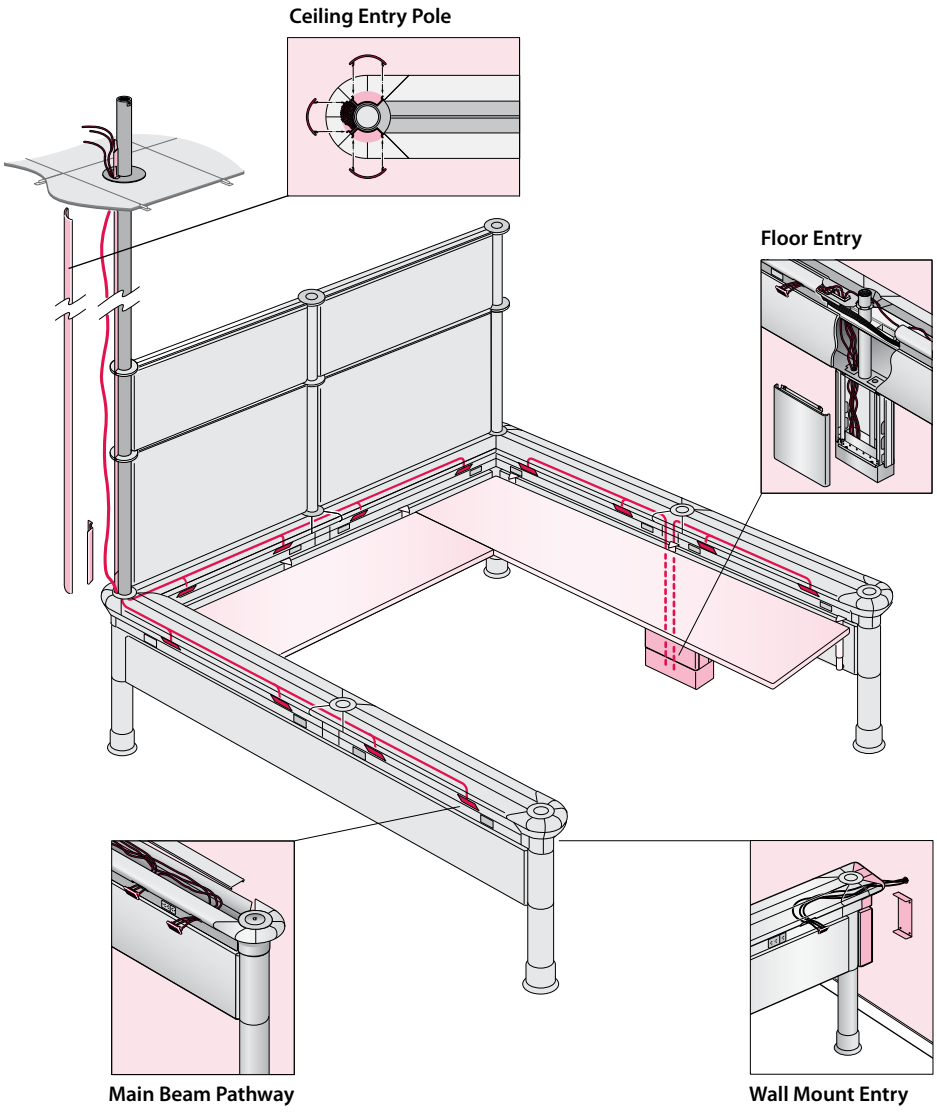
Engineered for maximum cable distribution flexibility, RACE allows for ceiling-, floor-, and wall-based infeed points. RACE main beams provide ample space for routing communication cables, and snap-on covers ease installation and reconfiguration.

RACE System Cable Pathway Routes

Cables can be routed through these pathways in the RACE system:

- Main beam pathway
- Floor entry:
  - floor entry conduit
  - floor power and communications cover
- Ceiling entry pole
- Wall mount power and communications entry

Note **Refer to Haworth's Guide to Cable Management brochure for more information about communication cable specification and planning.**

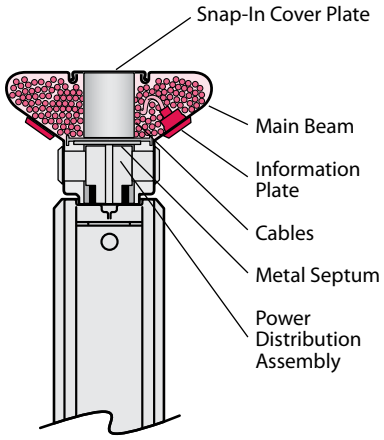


Cable Management

Cable pathways and access points in the RACE main beam:

- Cables are routed through a large-capacity pathway located in the top portion of the main beam, an area accessible via a snap-in cover plate; the cable pathway is separated from the electrical pathway by a metal septum.
- Worksurface-height access to communication and data cabling is through information faceplates with openings 1.37" (34.8mm) by 2.71" (68.6mm). RACE beams are shipped standard with blank faceplates, which feature snap-out cable pass-through slots:
  - four information plates — two on each side — are located on 36" (914mm)-, 48" (1219mm)-, and 60" (1524mm)-long main beams
  - eight information plates — four on each side — are located on 72" (1829mm)-, 84" (1283mm)-, 96" (2438mm)-, 108" (2743mm)-, and 120" (3048mm)-long main beams
  - Refer to the Specification Guide for the exact location of these plates for each main beam length

Note **Information plates and connectors must be purchased separately through industry suppliers; Haworth does not furnish these parts.**



Communication Cable Infeed and Routing

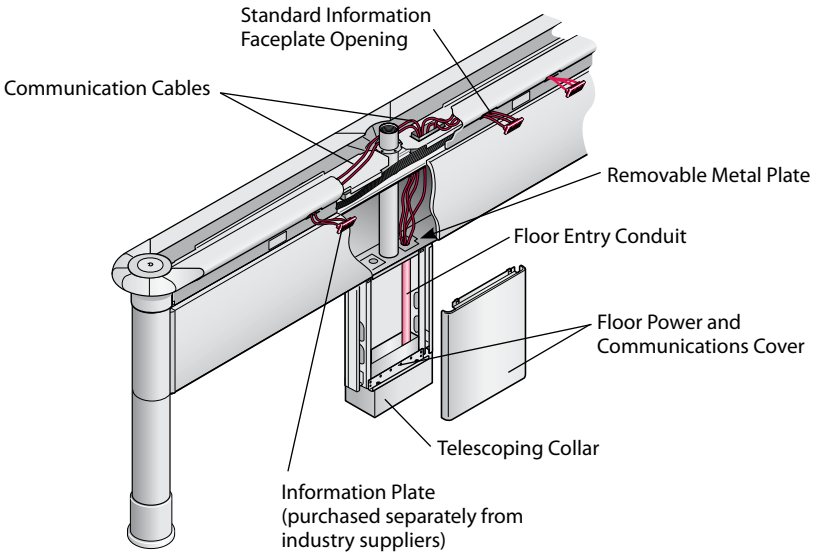
RACE main beams accept cable infeeds from floor, ceiling, or wall locations in the building. Installation of communication cable in the RACE main beam is easy: snap-in covers extend the length of the beam's top. These removable covers simplify cable lay-in and routing throughout a main beam configuration.

Floor Pathway Entry

- Floor entry conduit is available in ½" (13mm) and 1" (25mm) diameters to conceal communication cabling routed from the floor.
- Maximum cable capacity is achieved by omitting the metal plate and running data cable direct.
- The optional RACE floor power and communications cover conceals — and allows access to — cabling being routed from floor infeed locations into the RACE main beam.
- A telescoping collar extends to the floor to conceal all cables when the cover is positioned directly over the floor access point.

Note **The floor entry conduit entrance point and the floor power communications cover attachment location varies according to the main beam length:**

- **60" (1524mm)-, 72" (1829mm)-, 96" (2438mm)-, and 120" (3048mm)-long main beams: entry point and attachment is at midpoint.**
- **84" (2134mm)-long main beams: entry point and attachment is 36" (914mm) from one side, and at 48" (1219mm) from the other side.**
- **108" (2743mm)-long main beams: entry point and attachment is 48" (1219mm) from one side, and at 60" (1524mm) from the other side.**



Pathway Capacities: Floor Entry

This chart shows the number of Category 5, 4-pair unshielded twisted pair (UTP) cables that can be routed through floor infeed applications. Cable capacities are based on 0.20", 0.25", and 0.30" diameter cables at 60% and 40% fill capacity.

TIA/EIA 569A suggests a cable fill of 40% for planning purposes, allowing up to 60% for unplanned additions.

Pathway Capacities: Floor	CABLE PATHWAY AREA		CABLE COUNT 60% FILL			CABLE COUNT 40% FILL		
	SQ. IN.	SQ. MM.	0.20"	0.25"	0.30"	0.20"	0.25"	0.30"
Example:								
One Square Inch Pathway	1.0	645	19	12	8	13	8	6
Floor Pathway Application:								
Internal Vertical Duct	3.7	2390	71	45	31	47	30	21

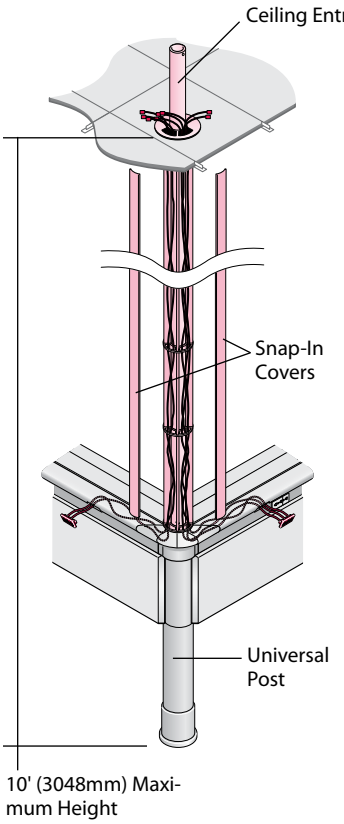
Communication Cable Infeed and Routing

Ceiling Entry Pole

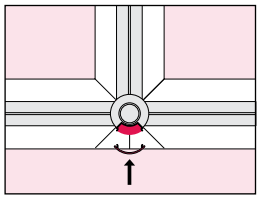
The RACE ceiling entry pole provides one, two, or three separate channels for routing communication cables to the main beam. It reaches a suspended ceiling that is up to 10' (3048mm) high. When used in an upper structure run, the pole replaces an upper post and supports the upper structure rails and pads.

- Height: 96" (2438mm)
- Pole attaches to the universal post at beam junctions or to the mid-point junction of main beams 72" (1829mm)-long and longer
- A separately specified (optional) ceiling entry communications box is designed for positive infeed connection in the ceiling space

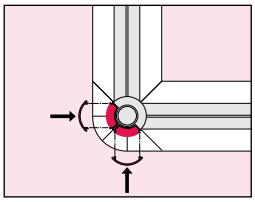
Note **Poles are not retrofittable for different upper structure applications.**



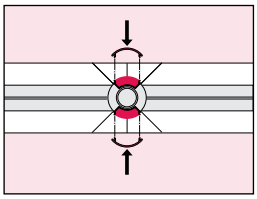
Snap-In Aluminum Cover Options



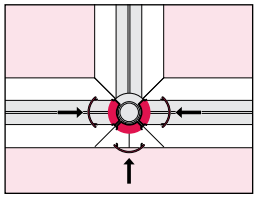
RECE-0045 — one-quarter communications channel



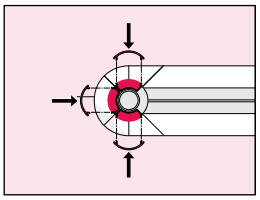
RECE-0090 — one-half communications channel



RECE-0180 — one-half communications channel



RECE-0270 — three-quarter communications channel



RECE-0270 — three-quarter communications channel

Pathway Capacities: Ceiling Entry Pole

This chart shows the number of Category 5, 4-pair unshielded twisted pair (UTP) cables that can be routed through one, two, or three channels of the ceiling entry pole. Cable capacities are based on 0.20", 0.25", and 0.30" diameter cables at 60% and 40% fill capacity.

TIA/EIA 569A suggests a cable fill of 40% for planning purposes, allowing up to 60% for unplanned additions.

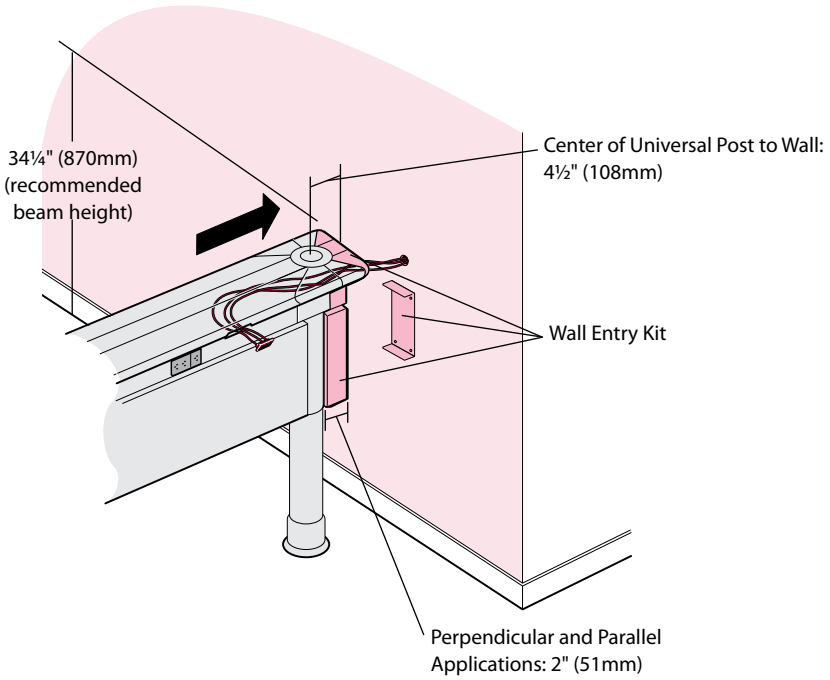
Pathway Capacities — Main Beam and Ceiling	CABLE PATHWAY AREA		CABLE COUNT 60% FILL			CABLE COUNT 40% FILL		
	SQ. IN.	SQ. MM.	0.20"	0.25"	0.30"	0.20"	0.25"	0.30"
Example:								
One Square Inch Pathway	1.0	645	19	12	8	13	8	6
Ceiling Entry Pole:								
One Channel	1.7	1100	32	21	14	22	14	10
Two Channels	3.4	2190	65	42	29	43	28	19
Three Channels	5.1	3260	96	62	43	64	41	29
Main Beam:								
Cable Pathway	9.1	5870	174	111	77	116	74	52

Communication Cable Infeed and Routing

Wall Entry

The RACE wall-mount power and communications entry is a 2" (51mm)- wide steel beam and raceway section that allows direct routing of power and communication cables into the RACE main beam.

- Accommodates 90° connection to wall at main beam end, or parallel connection to wall at beam end, or parallel connection to wall at beam mid-point on beams 72" (1829mm)-long or longer
- An installation template is provided with each wall-mount power and communications entry kit to ensure proper mounting location
- Kit includes attachment hardware



Pathway Capacities: Wall Entry

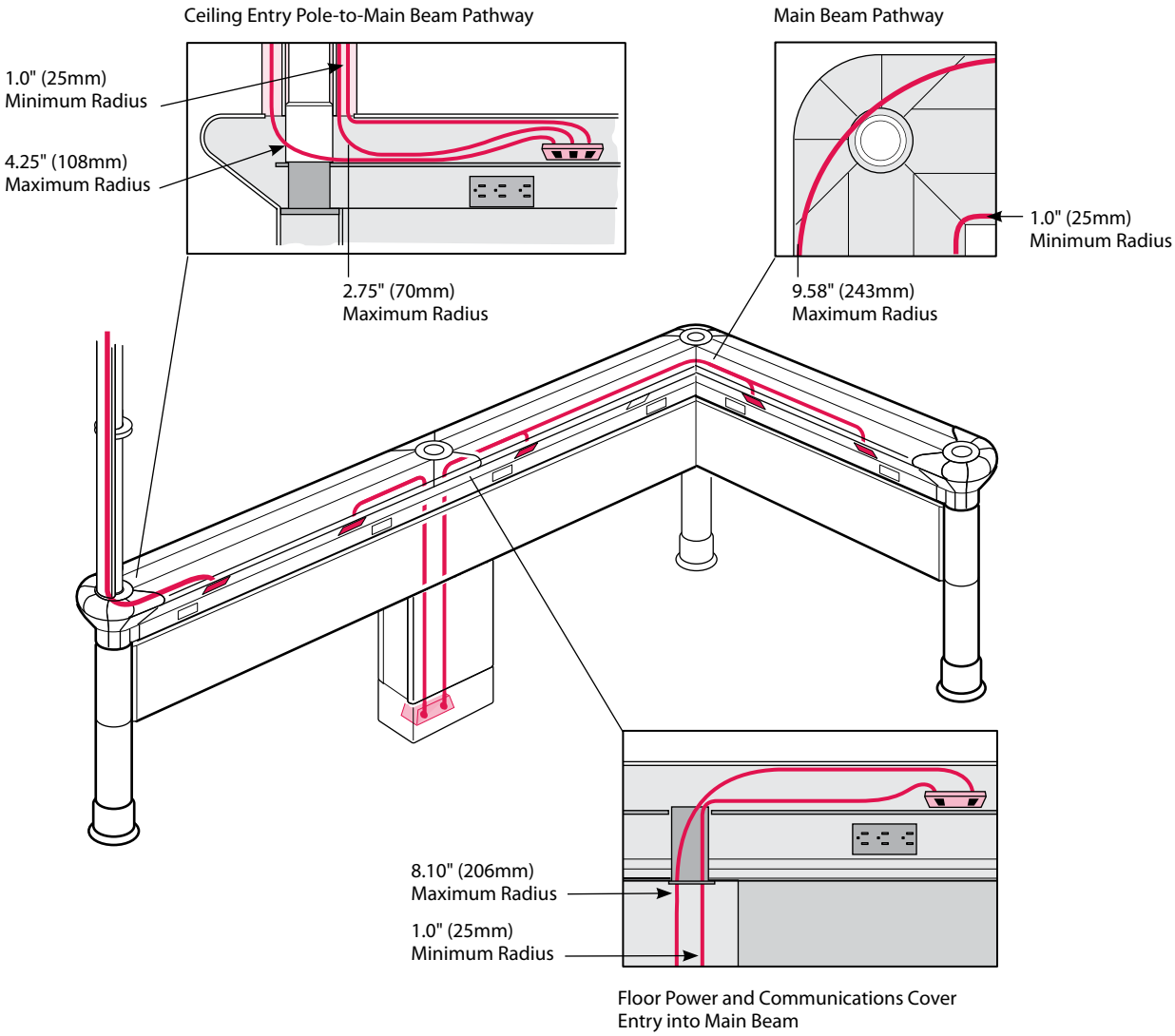
This chart shows the number of Category 5, 4-pair unshielded twisted pair (UTP) cables that can be routed through wall infeed applications. Cable capacities are based on 0.20", 0.25", and 0.30" diameter cables at 60% and 40% fill capacity.

TIA/EIA 569A suggests a cable fill of 40% for planning purposes, allowing up to 60% for unplanned additions.

Pathway Capacities: Wall	CABLE PATHWAY AREA		CABLE COUNT 60% FILL			CABLE COUNT 40% FILL		
	SQ. IN.	SQ. MM.	0.20"	0.25"	0.30"	0.20"	0.25"	0.30"
Example:								
One Square Inch Pathway	1.0	645	19	12	8	13	8	6
Wall Entry Application:								
Internal Duct	6.2	4000	118	76	53	79	51	35

Cable Bend Radius

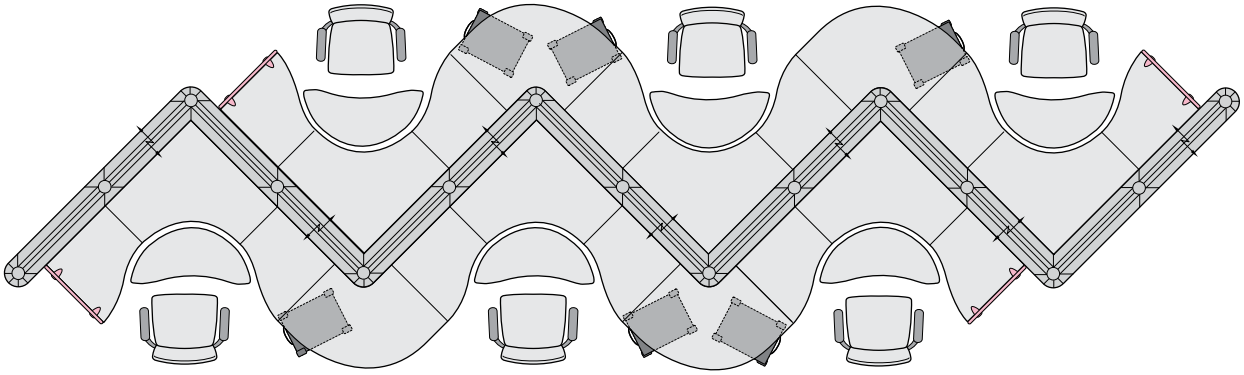
When planning the routing of communication cables through RACE main beams, you must consider the bend radius at the main beam-to-main beam connections and within the main beam pathways. These illustrations depict the minimum and maximum bend radii for cables in RACE pathways.

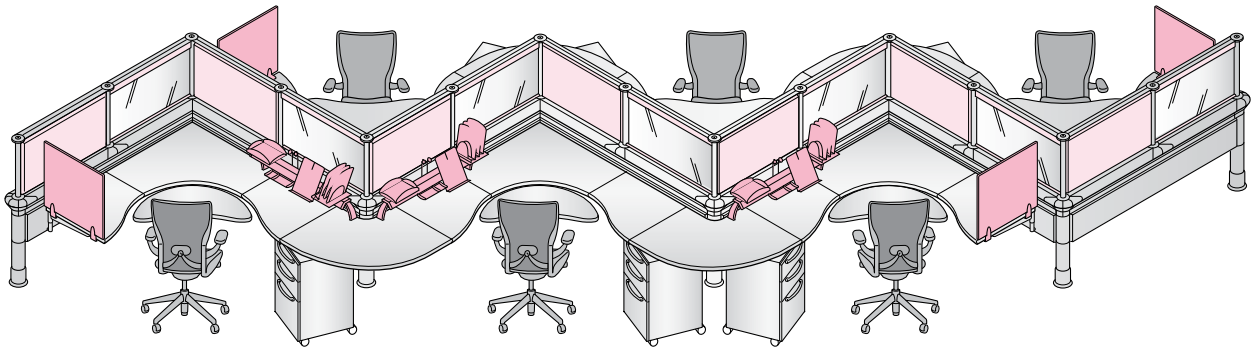


RACE

Idea Starters

Idea Starters

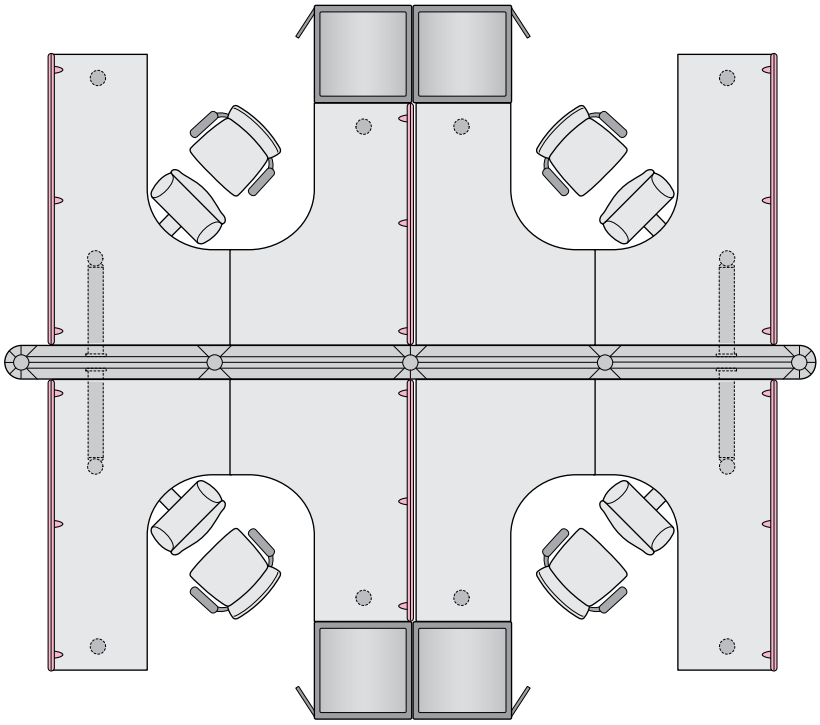


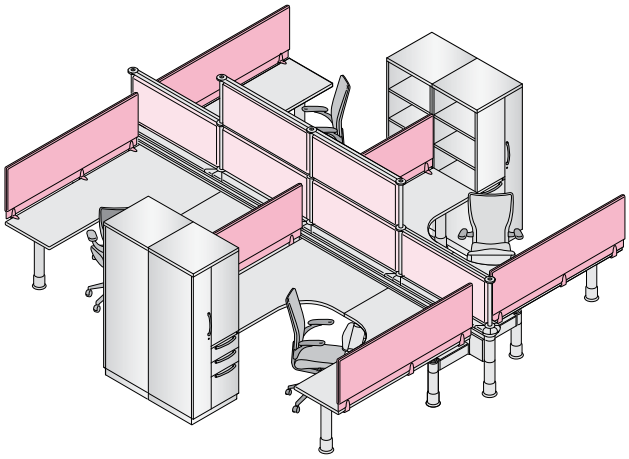


Serpentine Cluster: 6' x 6' Workstations

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
7	RBMP-0072	Main Beam, Powered, 72" L
8	RPOS-0002	Universal Post
15	RUS-0014	Main Beam Upper Post, One-High
7	RRA-0072	Rail, 72" L
7	RPC-0036	Acoustical/Tackable Pad Set, 36" W, 14" H
7	RTG-0036	Glass Window, 36" W, 14" H
6	RCWT-2412-LV	Main Beam, Transition Worksurface, 24" W, 16/24" D
6	RCWT-2421-LV	Main Beam, Transition Worksurface, 24" W, 24/16" D
6	RCWK-3616-LV	Main Beam, Split Curved Wrap-Around Worksurface, 36" W, 16" D
4	RCWL-0024-LV	Main Beam, Curved Link Worksurface, 24" D
4	BBD-1824-G	**if** Frosted Desktop Screen, 18" H, 24" W
6	JPMH-18-S2	X Series Mobile Pedestal, 17" D, 6/6/12
6	DPKS-36-F	Jump Stuff Mini Master Kit, Freestanding
6	X621-2W41	X99® Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

Idea Starters

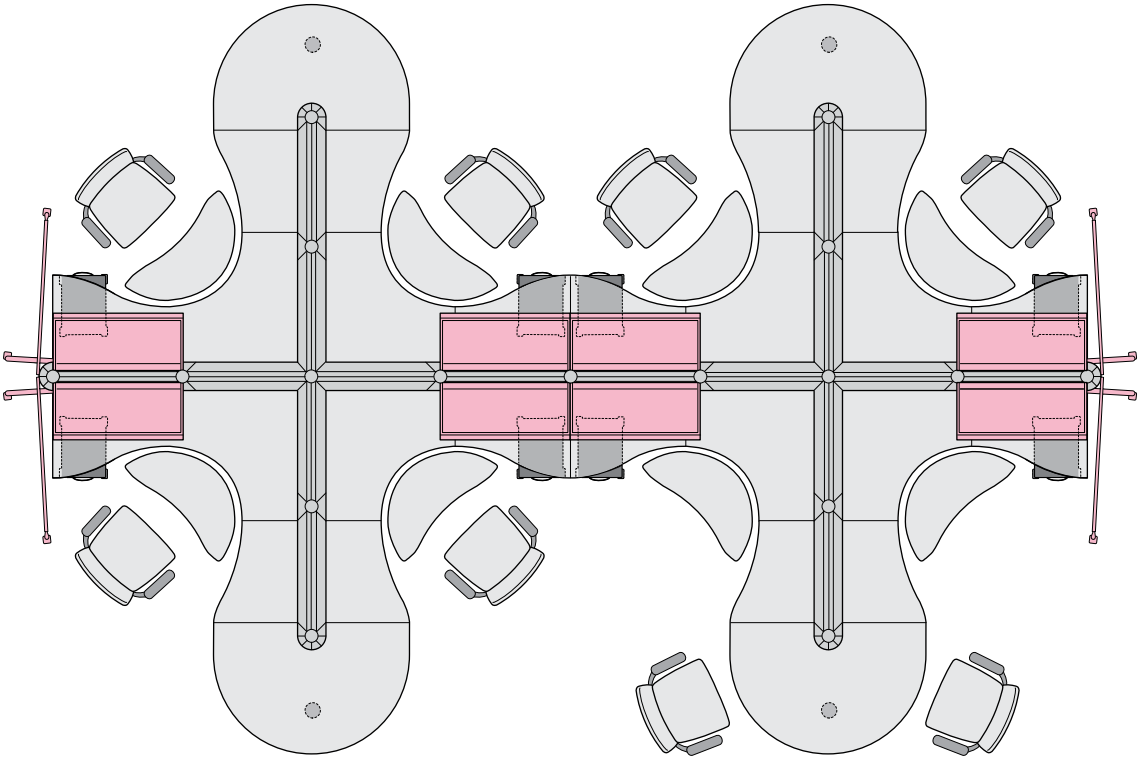


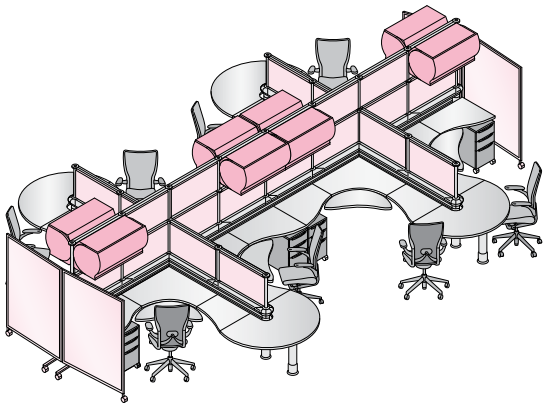


Modular Cluster: 8' x 8' Workstations

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
2	RBMP-0096	Main Beam, Powered, 96" L
3	RPOS-0002	Universal Post
4	RBS-0024	Main Beam Stabilizer, 24" D
3	RUS-0028	Main Beam Upper Post, Two-High
2	RUS-0014	Main Beam Upper Post, One-High
2	RRA-0048	Rail, 48" L
2	RRA-0096	Rail, 96" L
2	RPC-0048	Acoustical/Tackable Pad Set, 48" W, 14" H
2	RPC-0096	Acoustical/Tackable Pad Set, 96" W, 14" H
2	RCTE-6024-LVR	Main Beam, Curved Wrap-Around Extended Worksurface, Top Only, RH, 60" L, 24" D
2	RCTE-6024-LVL	Main Beam, Curved Wrap-Around Extended Worksurface, Top Only, LH, 60" L, 24" D
2	RCTE-7224-LVR	Main Beam, Curved Wrap-Around Extended Worksurface, Top Only, RH, 72" L, 24" D
2	RCTE-7224-LVL	Main Beam, Curved Wrap-Around Extended Worksurface, Top Only, LH, 72" L, 24" D
8	RCVC-0001	Convergent Support Kit, with Column
4	HKTE-21-N	Boogie® Board Keyboard Tray & Palm Rest, 21" Track
2	BBD-1860-T	**if** Fabric/Tackable Desktop Screen, 18" H, 60" W
4	BBD-1872-T	**if** Fabric/Tackable Desktop Screen, 18" H, 72" W
2	JTBB-6324-SS2R	X Series Personal Storage Tower, Side Bookcase, RH Valet, 63½" H, 24" W
2	JTBE-6324-SS2R	X Series Personal Storage Tower, Side Bookcase, LH Valet, 63½" H, 23" W
4	X621-2W41	X99 Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

Idea Starters

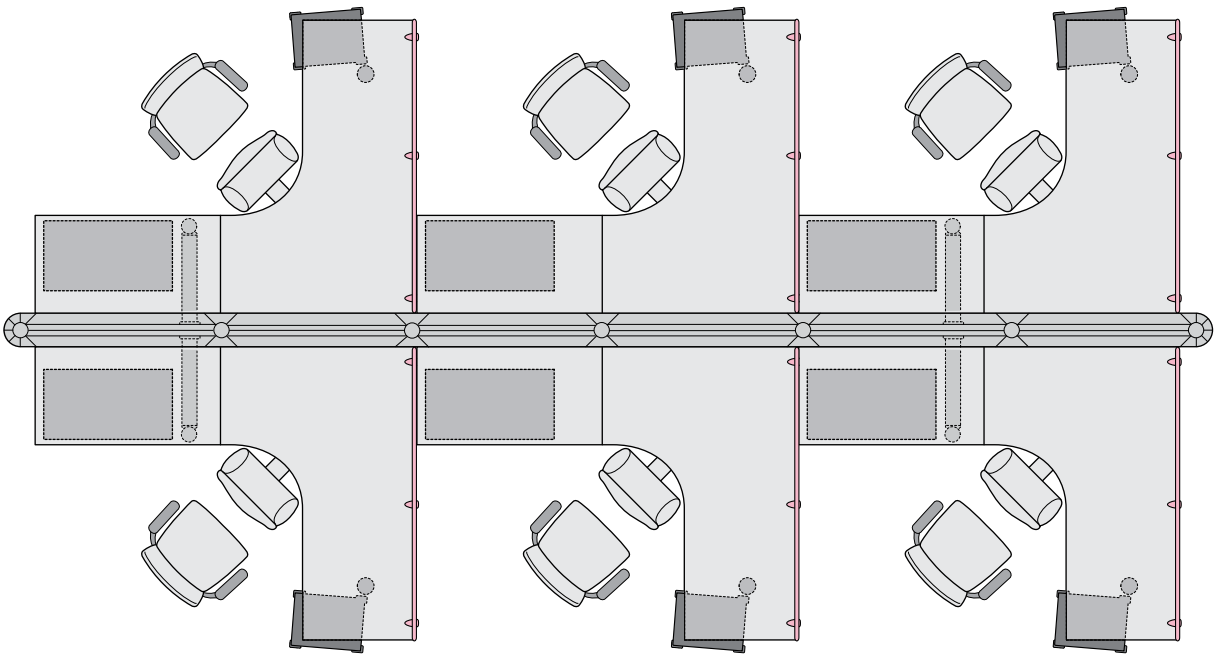


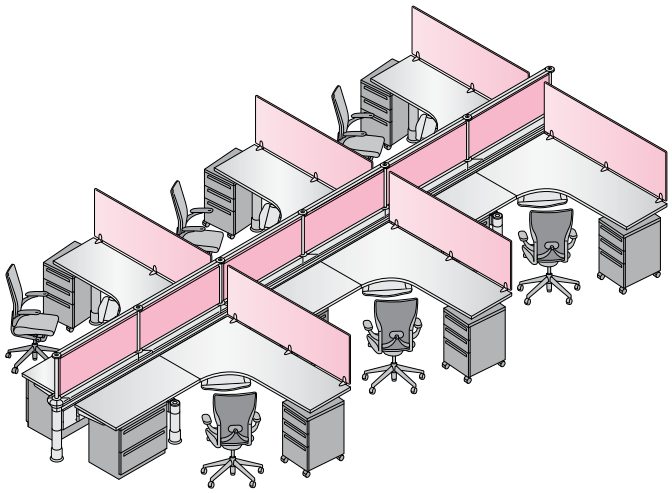


Modular Cluster: 6' x 8.5' Workstations

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
4	RBMP-0072	Main Beam, Powered, 72" L
4	RBMN-0072	Main Beam, Non-Powered, 72" L
9	RPOS-0002	Universal Post
9	RUS-0028	Main Beam Upper Post, Two-High
8	RUS-0014	Main Beam Upper Post, One-High
12	RRA-0072	Rail, 72" L
12	RPC-0072	Acoustical/Tackable Pad Set, 72" W, 14" H
4	RCWT-2812-LV	Main Beam, Transition Worksurface, 28" W, 16" /24" D
4	RCWT-2821-LV	Main Beam, Transition Worksurface, 28" W, 24" /16" D
4	RCWT-3212-LV	Main Beam, Transition Worksurface, 32" W, 16" /24" D
4	RCWT-3221-LV	Main Beam, Transition Worksurface, 32" W, 24" /16" D
8	RCWK-3616-LV	Main Beam, Split Curved Wrap-Around Worksurface, 36" W, 16" D
4	RCWF-5630-LV	Main Beam, Conference End Worksurface, 56" W, 30" D
4	BBF-4748-FA	**if** Screens, Freestanding Mobile, Fabric Insert, 47" H, 48" W
8	JPMH-18-S2	X Series Mobile Pedestal, 17" D, 6/6/12
8	RORS-36	OneTouch Overhead Storage, 36" W
8	LUTS-0030-16UEP	Adaptable Electronic Task Light, 30" W
8	X621-2W41	X99 Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

Idea Starters

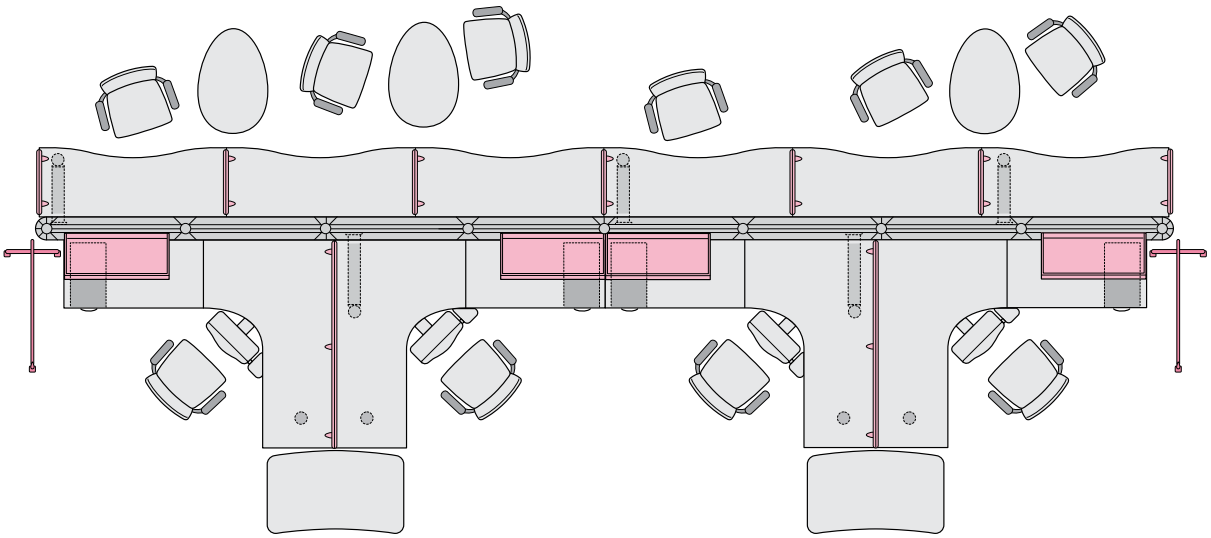


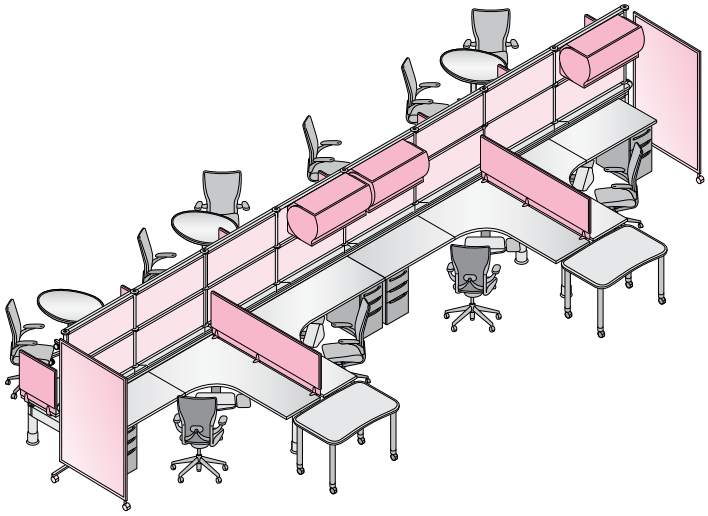


Modular Cluster: 8' x 6' Workstations

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
3	RBMP-0096	Main Beam, Powered, 96" L
4	RPOS-0002	Universal Post
4	RBS-0024	Main Beam Stabilizer, 24" D
7	RUS-0014	Main Beam Upper Post, One-High
3	RRA-0096	Rail, 96" L
3	RPC-0096	Acoustical/Tackable Pad Set, 96" W, 14" H
6	RCWR-4824-LT	Main Beam, Rectangular Worksurface, 48" W, 24" D
3	RCTE-7224-LTR	Main Beam, Curved Wrap-Around Extended Top Only Worksurface, RH, 72" L, 24" D
3	RCTE-7224-LTL	Main Beam, Curved Wrap-Around Extended Top Only Worksurface, LH, 72" L, 24" D
6	RCVC-0001	Convergent Support Kit with Column
6	HKTE-21-N	Boogie Board Keyboard Tray & Palm Rest, 21" Track
6	BBD-1872-G	**if** Frosted Desktop Screen, 18" H, 72" W
6	PDM-20-HLN	Mobile Drawer Pedestal, 20" D, 6/6/12
6	LHSS-230-LDOH	950 Credenza Lateral File, Two-High, 30" W
6	X621-2W41	X99 Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

Idea Starters

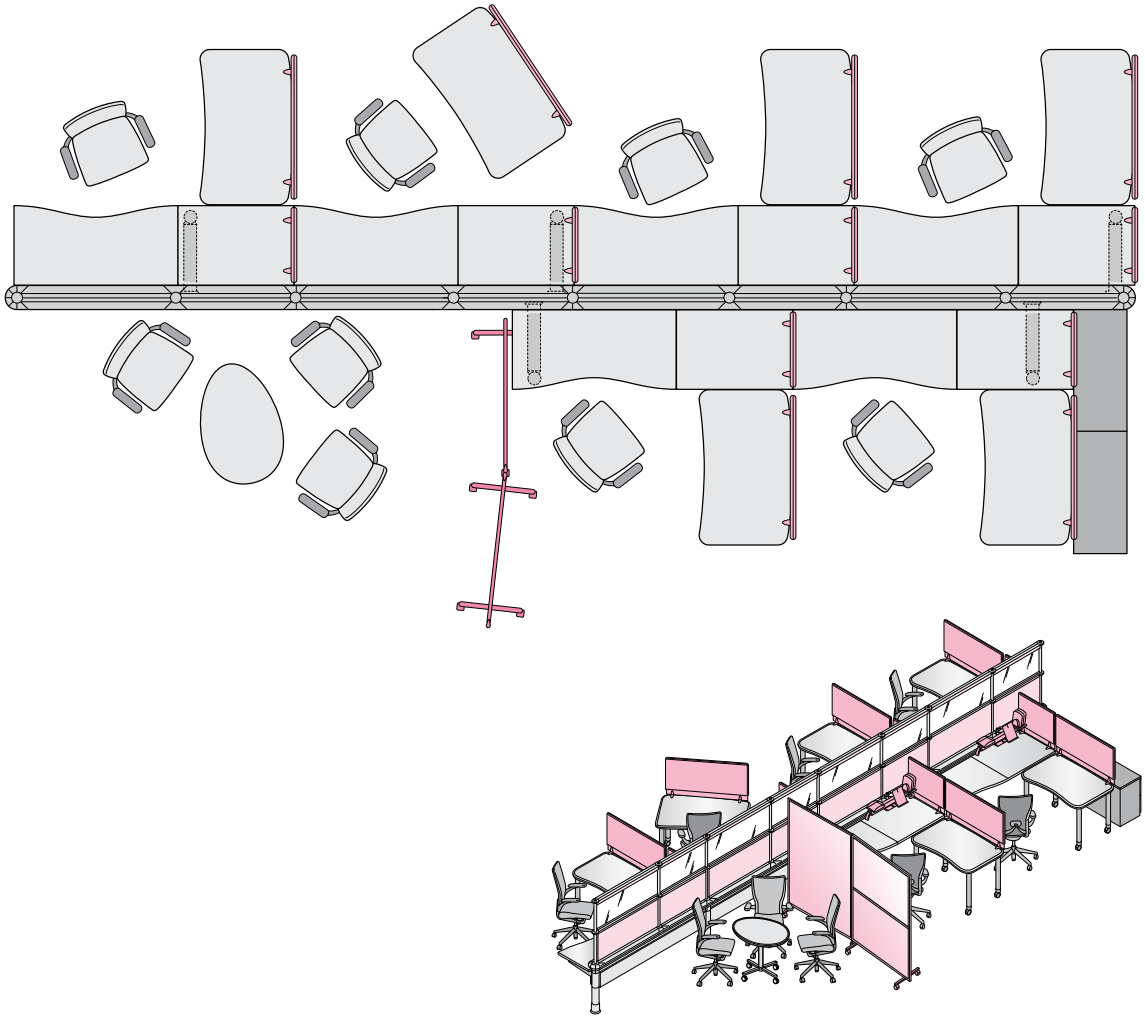




Off-Modular Cluster: 8' x 8.75' and 5' x 5' Workstations

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
4	RBMP-0096	Main Beam, Powered, 96" L
5	RPOS-0002	Universal Post
5	RBS-0024	Main Beam Stabilizer, 24" D
2	RKS-0001	Worksurface Support Kit
9	RUS-0028	Main Beam Upper Post, Two-High
8	RRA-0096	Rail, 96" L
8	RPC-0096	Acoustical/Tackable Pad Set, 96" W, 14" H
4	RCWR-4824-LV	Main Beam, Rectangular Worksurface, 48" W, 24" D
6	RCWI-6424-LV	Main Beam, Inverse Swell Worksurface, 64" W, 24" D
2	RCTE-7224-LVR	Main Beam, Curved Wrap-Around Extended Worksurface, Top Only, RH, 72" L, 24" D
2	RCTE-7224-LVL	Main Beam, Curved Wrap-Around Extended Worksurface, Top Only, LH, 72" L, 24" D
4	RCVC-0001	Convergent Support Kit, with Column
4	AKPM-23-SFM	Adjustable Keyboard Pad with Swivel Mouse Pad
3	BTGF-3624-LVSM	**if** Table, Egg Top, X Base with Casters, Fixed Height, 36" W, 24" D
2	BTDF-4833-LV4M	**if** Table, Bend Top, 4 Legs with Casters, 48" W, 33" D
2	BBD-1872-T	**if** Fabric/Tackable Desktop Screen, 18" H, 72" W
7	BBD-1824-T	**if** Fabric/Tackable Desktop Screen, 18" H, 24" W
2	BBF-6348-FA	**if** Screens, Freestanding Mobile, Fabric Insert, 63" H, 48" W
4	JPAH-24-S2	X Series Attached Pedestal, 23" D, 6/6/12
4	RORS-36	OneTouch Overhead Storage, 36" W
4	LUTS-0030-16UEP	Adaptable Electronic Task Light, 30" W
10	X621-2W41	X99 Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

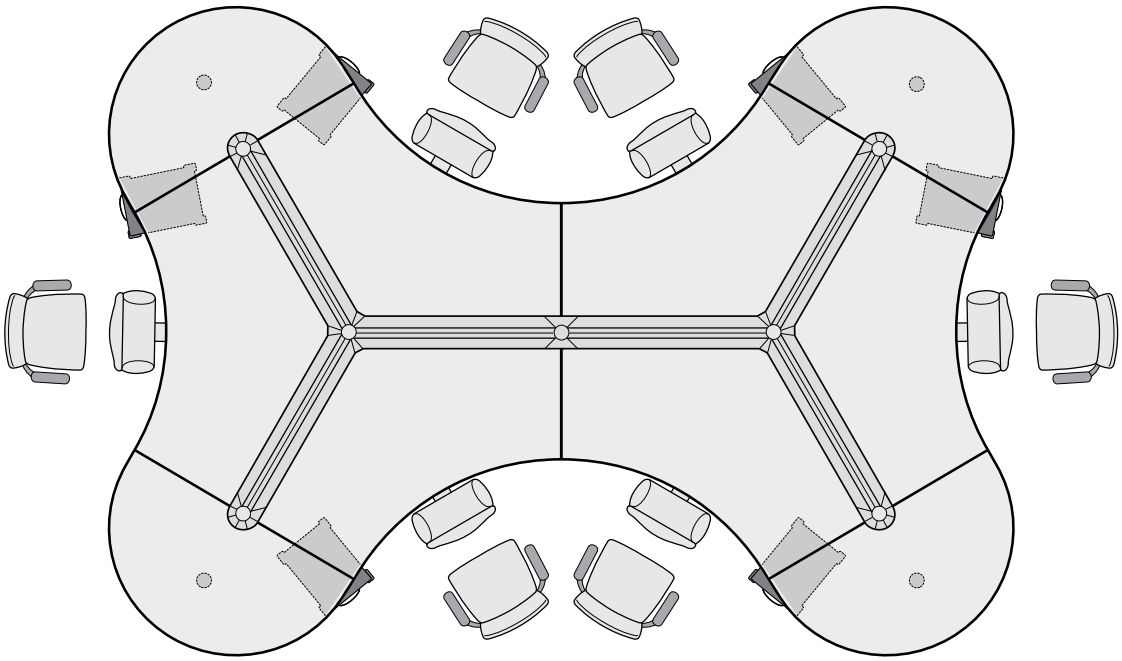
Idea Starters

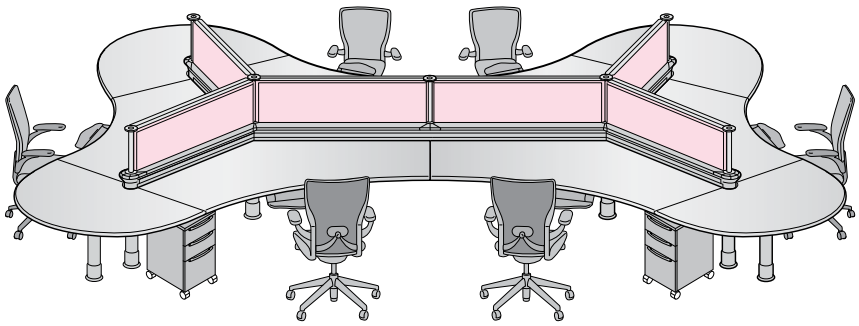


Off-Modular Cluster: 7' x 6' Workstations

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
4	RBMP-0084	Main Beam, Powered, 84" L
5	RPOS-0002	Universal Post
5	RBS-0024	Main Beam Stabilizer, 24" D
9	RUS-0028	Main Beam Upper Post, Two-High
8	RRA-0084	Rail, 84" L
4	RPC-0084	Acoustical/Tackable Pad Set, 84" W, 14" H
4	RTG-0084	Glass Window, 84" W, 14" H
6	RCWR-3624-LV	Main Beam, Rectangular Worksurface, 36" W, 24" D
6	RCWI-4824-LV	Main Beam, Inverse Swell Worksurface, 48" W, 24" D
1	BTGN-3624-LVSM	**if** Table, Egg Top, X Base with Casters, Height Adjustable, 36" W, 24" D
6	BTDF-4833-LV4M	**if** Table, Bend Top, 4 Legs with Casters, 48" W, 33" D
6	BBD-1824-T	**if** Fabric/Tackable Desktop Screen, 18" H, 24" W
6	BBD-1842-T	**if** Fabric/Tackable Desktop Screen, 18" H, 42" W
1	BBF-6348-FA	**if** Screen, Freestanding Mobile, Fabric Insert, 63" H, 48" W
1	BBF-6348-MA	**if** Screen, Freestanding Mobile, Markerboard/Fabric Insert, 63" H, 48" W
2	LFRS-236-LDCH	950 Lateral File, with Counterweight, Two-High, 36" W
6	DPKS-36-F	Jump Stuff Mini Master Kit, Freestanding
9	X621-2W41	X99 Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

Idea Starters

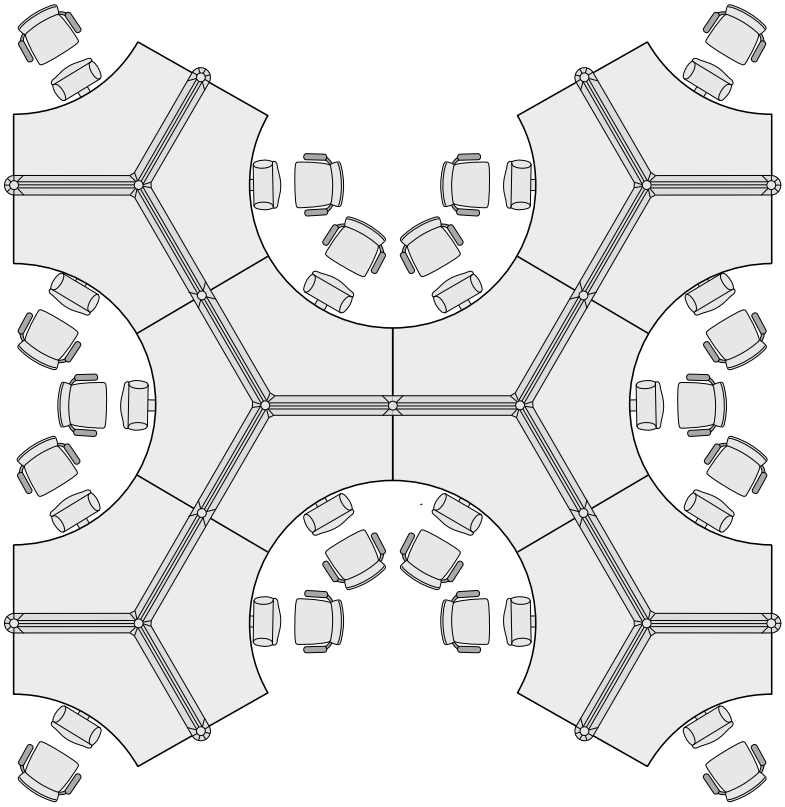


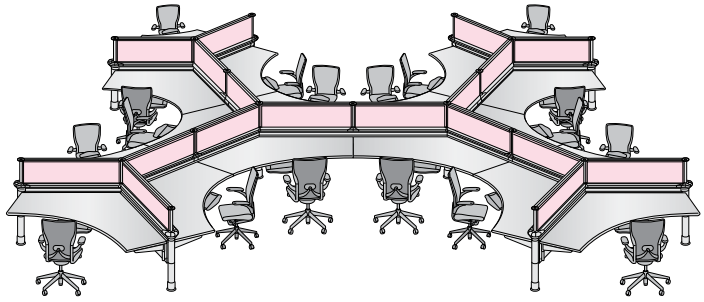


6 Station 120° Configuration

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
1	RBMP-0096	Main Beam, Powered, 96" L
4	RBMP-0048	Main Beam, Powered, 48" L
6	RPOS-0002	Universal Post
2	RKY-0120	120° Beam Connector, Y Application
6	RRA-0048	Rail, 48" L
7	RUS-0014	Main Beam Upper Post, One-High
6	RTG-0048	Glass Pad, 48" W, 14" H
6	RCWQ-4824	Main Beam, 120° Corner Worksurface, 48" W, 24" D
4	RCWF-5624	Main Beam Flush Conference End Worksurface, 56" W, 24" D
6	HKTC-21-N	Boogie Board Keyboard Tray with Palm Rest, 21" Track
6	PDM-24-HLN	Mobile Drawer Pedestal - 6/6/12, 24" D
6	X621-2W41	X99 Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

Idea Starters





Snowflake Configuration

QTY	PRODUCT NUMBER	PRODUCT DESCRIPTION
5	RBMP-0096	Main Beam, Powered, 96" L
8	RBMP-0048	Main Beam, Powered, 48" L
18	RCWQ-4824	Main Beam, 120° Corner Worksurface, 48" W, 24" D
14	RPOS-0002	Universal Post
6	RKY-0120	120° Beam Connector, Y Application
19	RUS-0014	Main Beam Upper Post, One-High
13	RRA-0048	Rail, 48" L
9	RTG-0096	Glass Pad, 96" W, 14" H
18	HKTC-21-N	Boogie Board Keyboard Tray with Palm Rest, 21" Track
18	X621-2W41	X99 Task Chair, 3-Dimensional Arm, Pneumatic Height, Lumbar, Mesh Back, Soft Cap

Technical Specifications

Technical Specifications

Beam Assembly

Main and Mini Beam

The lower portion of the beam is constructed from two 14-gauge steel sheets formed into channels and welded together to form a 4" (102mm)-wide by 11" (280mm)-high box, which provides the main structure for the system. The beam ends are finished with clevis brackets that provide mounting to the universal post or beam mid-point.

Raceway

The upper portion of the beam is accessible through a hand-removable 18-gauge cover and permits the distribution of wiring through the system in separate raceways. The electrical raceway is located below the telecommunications raceway and is separated and accessible by means of removable 20-gauge covers secured by screws.

Universal Post

The top of the post is threaded to allow installation of the upper posts. Mounted at the top of the 4" (102mm) diameter section are removable covers. These covers are designed for aesthetic purposes and to provide a separate raceway for electrical and telecommunication wires to pass from beam to beam.

Main Beam Modesty Panels, Solid and Perforated

The modesty panel is constructed of 18-gauge cold-rolled steel and is available in solid or perforated versions. Modesty panels may be installed single- or double-sided. Double-sided installations have a 2" (51mm) clearance to allow cabling to travel between the modesty panels up into the beam. Modesty panels are supported from the beam by 11-gauge mounting brackets, which are fastened to the beam.

Power and Communications Management

Infeed Harness

The power infeed harness carries power into the powered main beam from a building source in the ceiling, floor, or wall. Standard infeed harness length is 12' (3.7 meters). Harnesses measuring 30' (9.1 meters) and 50' (15.2 meters) are also available. All are constructed of 12 AWG wire. The infeed harness can enter the beam through three types of housing: floor entry, ceiling entry pole, and wall mount.

Floor Entry Conduit

The floor-entry conduit consists of a 72" (1829mm) length of flexible, liquid-tight conduit. This conduit encloses the infeed harness, which is specified separately. The floor-entry conduit is available in ½" (13mm) and 1" (25mm) diameters.

Floor Power and Communications Cover

This product conceals and protects infeed harnesses from the floor to the beam for 60" (1542mm)-long and longer beams. The internal construction is a 16-gauge steel frame fabricated into channels and welded together. This frame mechanically fastens to the underside of the beam. The cover panels that conceal the frame are fabricated of 20-gauge cold-rolled steel and are hooked to the frame at the top and secured at the bottom with ¼" 20 cap screws. These covers are easily removed to aid the installation of feeder cables.

Technical Specifications

Ceiling Entry Power Pole
The ceiling entry pole carries and conceals infeed harnesses from the ceiling down to the main beam. The ceiling pole provides up to three additional, separate quarter-channels for routing communication cables. The capacity of each quarter channel is (32) 0.020 category 5 UTP cables at 60% fill. See the charts in the Cable Management section for other capacity rates.

Ceiling entry power poles are constructed of 2" (51mm) diameter 16-gauge steel tube for electrical harnesses. The bottom of the tube is expanded to fit over the thread socket at the top of any universal post, or at a main beam mid-point on beams 72" (1829mm)-long and longer. The communication wiring can be laid into 16-gauge steel W-shaped channels attached around the outside of the electrical pole.

Access to the communication channel is provided by snapping the quarter segment aluminum extrusions from the W-shaped channels. The bottom of each communication channel has a 3" (76mm) section of W-channel that slides up and down within the communication channel. This section provides a means of exit for communication wire at the top of the universal post.

The top of the electrical post is fitted with a double knock-out mounting plate that provides for attachment of ½" (13mm) and 1" (25mm) diameter conduit. An optional ceiling communication junction box is available to provide ½" (13mm) and 1" (25mm) diameter conduit attachment for communication wiring. This option is normally used in an open plenum application.

Wall Mount Power and Communications Entry
The wall-mount power entry is a 2" (51mm) deep section of the steel beam and raceway. It mounts to the end of a universal post that is positioned against a building wall or column. It allows direct routing of an infeed harness from a junction box from within a building wall or column. The communications capacity is (118) 0.020 diameter category 5 UTP cables at 60% fill. See the charts in the Cable Management section for other capacity rates. The beam is attached to an 11-gauge metal bracket which is attached to the wall. The double knock-out ½" (13mm) by 1" (25mm) plate assembled against the wall provides for attachment of conduit for the electrical entry. The beam attaches to the wall mount at either a universal post or a beam mid-point on a 72" (1829mm)-long or longer beam length.

Power Distribution Assembly
Electrical power is delivered through the infeed harness to The Power Base power distribution assembly within a powered main beam. Powered main beams come with factory-installed power distribution assemblies and flexible power connectors to continue power between adjacent power distribution assemblies. Internal wiring of the power distribution assembly is #12 AWG. The connectors to infeed harness and flexible power connectors have positive-locking male/female connectors to ensure proper polarity of the circuits.

Each power distribution assembly is provided with one, two, three, or four power blocks, depending on the main beam length. The power block accepts a combination of four plug-in connections utilized by an infeed harness, a flexible power connector, pass-through harness, or ambient light feed.

Electrical Receptacles
Electrical power distributed by the power distribution assembly is accessed by two different receptacles. Each receptacle accesses one of three circuits and is identified as either common ground or isolated ground. The isolated ground has an orange "▲IGR" indicator logo on its face. The receptacle plugs into the power block on the power distribution assembly and is secured to the beam by two screws.

Receptacles are field-programmable for assignment to circuit 1, 2, or 3.

Technical Specifications

Upper Structure

Upper Post
The upper posts are made from 2" (51mm) diameter steel tubing with 0.156" (4mm) wall thickness. The ends of the tubes have 1⁷⁄₈" 12 male threads on the bottom and 1⁷⁄₈" 12 female threads at the top, including two 4" (102mm) diameter, 0.125" (3mm)-thick steel rail mounting rings and one black plastic ring spacer. At the top of the two-high post, a black plastic cap is screwed into the two-high post to secure the top rail mounting rings.

Upper Rail
The rails are fabricated from 0.125" (3mm)-thick steel, which is formed into a T-shaped configuration. The tee is formed with a 0.19" (5mm) gap between the two vertical legs, providing a mounting slot for a variety of components. The ends are tapped and equipped with ³⁄₈-16 set screws for anchoring to the rings on structural posts. The ends also incorporate a centering cam which rotates on a pin as the rail is installed. The cam grips the upper post as the rail is rotated into place. When the rail is centered, the mounting screw is assembled through a slot in the cam.

Acoustical/Tackable Fabric Pads
The pads are constructed on 0.125"-thick hardboard layered between two 0.50"-thick pieces of mineral board. The board is wrapped and laminated with fabric on the front and attached in the back with staples. Plastic light block material is then added with staples on the back at the bottom and the two sides. Two metal spring clips are screwed on the back top edge of the pad for attachment purposes.

Mini-Beam Acoustical/Tackable Fabric Pads
Construction of the mini beam pad is similar to the main beam pad, with the addition of a pad stiffener made of 0.60" (15mm)-thick steel.

Window, 14" (356mm)
The window panel provides a see-through barrier at the one- or two-high level of the upper structure. The assembly is made of an upper and lower mounting channel with a ³⁄₁₆"-thick acrylic panel in several colors. The window is also available in a 0.16" (4mm)-thick tempered safety glass with several patterns. The mounting channels are 0.050"-thick aluminum extrusions. A screw and T-Nut attach the lower channel to the top of the raceway cover. The upper channel slides up onto the structural rail. The window panel is inserted into the upper channel and rotated until it drops into the gap of the lower channel.

Worksurfaces

Wood Veneer Worksurfaces
1³⁄₁₆" (30mm) wood worksurfaces are made with a wood composite core. Worksurfaces and edges feature flat sliced natural veneer with a ⁵⁄₈" radius solid bullnose front edge and ³⁄₁₆"-thick side edges and are finished with a synthetic lacquer.

Laminate Worksurfaces
1³⁄₁₆" (30mm)-thick worksurfaces are made with a wood composite core and are available in two options: high-pressure laminate tops having Cascade vinyl edge on front user side, with 0.040" (1mm) PVC edgebanding on sides and back; or high-pressure laminate with standard vinyl edge on all sides. All surfaces use a backer material to provide a balanced construction.

Worksurface Mounting
The worksurface hanging bracket is 0.125" (3.18mm)-thick steel formed into a "U" shape and pierced to provide 5" (127mm) of height adjustment on 1" (25mm) centers (2" height adjustment on mini beam). The 0.125" (3.18mm)-thick plate with a 90° form serves as the beam-attachment mechanism. Bolted to the bracket is a "U"-shaped gusset of 16-gauge steel, pierced to accept the mounting of the top. Brackets are attached to the top with flat-head screws and an attachment bracket.

Technical Specifications

Worksurface Accessories

Adjustable Keyboard Pads

Adjustable keyboard pads mount to the underside of worksurfaces. Models offer a range of common features including:

- Adjustable pad width from 17" (432mm) to 22" (559mm)
- Adjustable backstop for keyboards from 5.25" (134mm) to 9" (229mm) deep
- 360° pivot and storage track to permit leg swing under worksurface

if Desktop Screens

The **if** desktop screen consists of a flat screen mounted to a worksurface with mounting brackets. The tackable version consists of a 0.225" (5.7mm)-thick high pressure laminate/hardboard/high pressure laminate core sandwiched between two pieces of fabric-covered insulation board. The completed tackable screen is 0.983" (24.7mm) thick. The frosted acrylic version is a 0.230" (5.8mm)-thick flat rectangular piece of frosted, textured acrylic sheet. Either option slides into wet coated diecast aluminum mounting bracket assemblies and is secured in place through small plastic extrusions within the brackets. The mounting brackets are clamped to the worksurface with a set screw located on the bottom side of the bracket. All screens have two mounting brackets with the exception of the 72" (1829mm)-wide screens that have three.

if Freestanding Mobile Screens

The **if** freestanding mobile screen consists of a metal frame with either a woven fabric insert, perforated metal insert, frosted acrylic insert or markerboard insert.

The frame is constructed of four powder-coated extruded aluminum rails connected by fasteners at each corner. Top and bottom frame rails have an approximate ¾" (19.1mm) x 1¾" (44.5mm) cross section while the side rails are 1⅛" (28.6mm) x 2¼" (57.2mm) in size. The woven insert consists of a single weave fabric with arrow shaped polypropylene extrusions sewn around the perimeter. Within each rail section is a channel into which fits the plastic arrows of the woven insert.

The screen is stabilized by one or two cast aluminum T-Leg bases that are 19" (483mm) wide and attached to bottom corners. The perforated screen insert is 18-gauge powder-coated steel and held in place with a polypropylene extrusion. The frosted, textured acrylic screen insert is 0.184" (4.7mm)-thick and inserts into frame. The markerboard screen insert is double-sided dry-erase, high-pressure laminate with wood composite core; it inserts into the frame. Markerboard is separated from lower insert by powder-coated aluminum extrusion.

To provide mobility there are three 1.97" (50mm)-diameter swiveling casters, one locking and two non-locking. The locking caster is inserted into one bottom corner of the screen. The other two casters are inserted into the ends of the T-Leg base. For screens with markerboard, perforated metal or frosted acrylic inserts, there are two T-Legs each having one non-locking and one locking swivel caster.

Same height screens can be connected together via rubber o-rings, which fit into grooves at the top and bottom corners of the screen assembly.

Technical Specifications

Storage Components

Standard Overhead Storage Unit and Shelf

The end panels of the standard overhead storage unit are fabricated from a resin/flourboard mixture and finished by a four-step process using a two-step textured paint that fills and seals. The bottom shelf is formed from 16-gauge steel for 36" (914mm) and 48" (1219mm) sizes. The bottom shelf is formed from 14-gauge steel for the 60" (1524mm) version. Top and back panels are formed from 18-gauge and 21-gauge steel, respectively. The door panel is formed from 20-gauge steel rigidized metal with a horizontal ribbed pattern. A 20-gauge steel stiffener is bonded to the back of the door to stiffen the door and provide a mounting surface for the ball- bearing door slide mechanism. Plastic corner caps, which snap into the door, are provided to trim the corners. The lock is located in the center near the bottom edge of the door. Locking the door activates a locking cam that rotates down into a slot near the front edge of the shelf.

The standard overhead shelf units are sized and constructed using the same materials and methods as the storage units. Shelves are made up of end and back panels, and lower shelf components.

Standard storage and shelf units can be mounted to the one- or two-high structure of the RACE system by simply engaging the top mounting bracket into the center horizontal slot at the top of the rail. A reversible mounting foot at the bottom back edge of the lower shelf can be configured in two ways: resting against the beam raceway for one-high mounting, or resting against the lower rail for two-high mountings. To mount the storage or shelf units on a one-high mini pad level, a separate bracket is available.

OneTouch Open Shelf and Overhead Storage Unit

The OneTouch shelf unit's shelf and overhead storage unit's shelf, top, and back are constructed of 18-gauge, 0.048" (1.2mm) roll-formed steel with 16-gauge, 0.06" (1.5mm) stamped steel end panels. A formed front edge conceals an optional task light. Flanges on the back of the shelf and cabinet assembly attach to 14-gauge, 0.075" (1.9mm) stamped steel brackets. Each bracket is secured to the upper structure rail with an anti-dislodgement screw. The cabinet and shelf are secured to the bracket with a die-cast zinc twist lock. The overhead storage unit door is injection-molded ABS. Metal counterweights are inserted into the injection molded ABS end panels of the door to allow opening and closing of the door with less than 5 pounds (2.26kg) of force. The overhead storage unit and shelf are off-modular, which allows them to mount anywhere brackets can access the structural rails. Brackets can also be offset up to 12" (309mm) from outside edge of unit. The door opens over the cabinet for maximum access to stored materials. The overhead storage unit and shelf unit ship assembled.

Standard Pedestals

Standard pedestal cases feature black e-coat drawers and a powder paint exterior. They are available in the following styles:

- Suspended – hangs from a worksurface by threaded fasteners; available in 20" (508mm) and 24" (610mm) depths.
- Attached – supports worksurface and attaches by threaded fasteners; includes 1" (25mm) adjustable leveling glides; available in 20" (508mm) and 24" (610mm) depths.
- Freestanding – freestanding with 1" (25mm) adjustable leveling glides; available in 20" (508mm) and 24" (610mm) depths.
- Mobile – freestanding with dual-wheel casters and a counterweight; available in 20" (508mm) and 24" (610mm) depths.

Steel pedestals feature a welded construction of 22-gauge sheet steel cases with 16- and 18-gauge structural members. The drawers also feature a welded construction with: 22-gauge steel bottoms; 22-gauge steel, single-wall sides with hemmed top seams; 22-gauge, double-wall fronts; 24-gauge backs; and 24-gauge security panels. An optional, 24-gauge steel sliding reference shelf is also available.

Technical Specifications

Steel pedestal drawers feature integral, full-width drawer pulls. 6" (152mm)-high box drawers and 3" (76mm)-high pencil drawers are constructed with ¾-extension steel ball-bearing slides. File drawers include full-extension, anti-rebound, steel ball-bearing slides. Each drawer includes rubber bumpers for quiet and safe operation. All pedestals may be specified with optional, interchangeable locks with keyed-alike or master-key programs.

A variety of drawer stack combinations are available that include one or more of the following drawer styles:

- 3" (76mm)-high, ¾-extension pencil drawer
- 6" (152mm)-high, ¾-extension box drawer with three (3) steel drawer dividers
- 12" (305mm)-high, full-extension file drawer with a steel file compressor
- 15" (381mm)-high, full-extension EDP file drawer with a steel file compressor

Each pedestal with a pencil drawer and/or a box drawer is furnished with a molded ABS plastic pencil tray. Box drawers are furnished with one (1) metal side-to-side divider. File drawers include a compressor and can accommodate suspended, standard filing for letter and A4-size paper, and front-to-back and side-to-side filing for A4-, legal- or letter-size paper.

Separately specified drawer accessories may include stationery organizers and dividers, a steel reference tray with a clear acrylic cover, additional pencil trays, and side-to-side drawer dividers.

950 Series Lateral Files

950 Series freestanding lateral files are finished with wet coat paint on the cabinet, drawer fronts, and tops and black e-coated drawers. 950 Series lateral files feature a built-in interlock mechanism that only allows one drawer to be opened at a time for safety purposes. Lateral file and storage unit cases are 20-gauge (.036", .9mm) steel. All files and storage units are locking. Drawer interiors in lateral files accept adjustable hanger bars. Lateral file drawers are 12" (305mm) high and contain one side-to-side hanger bar. They are available with either three dividers per drawer or one compressor per drawer. Storage units have one adjustable shelf. Additional shelves are specified separately.

X Series Steel Gauge Overview

	PEDESTALS	LATERAL FILES	COMBINATION UNITS	WARDROBES/ STORAGE CABINETS	BOOKCASES	PERSONAL STORAGE TOWERS
TOP	18	22	22	22	22	20
TOP SUPPORT	—	20	20	20	20	—
CASE	20	22	22	22	22	20
FRONTS	22	22	22	22	22	22
VERTICAL RAILS	18, 20	20	20	20	20	18, 20
INNER BASE	20	22	22	22	22	20
OUTER BASE	—	18	18	18	18	20
DRAWER SIDES	22	—	—	—	—	22
DRAWER FRONT	22	—	—	—	—	22
DRAWER REAR	24	—	—	—	—	24
SHELF		18	18	18	18	20

Pulls

X Series Pull Options:

- Ellipse Pull: ABS nylon blend
- Radius and Taper Pull: Die cast zinc alloy
- Crescent, Linear and Classic Pulls: Brushed nickel with matte finish

Technical Specifications

Lighting

Task Light
Body: Roll-formed steel housing with welded-in-place steel end panels and baked-on epoxy powder-coat finish.
Cover: Roll-formed steel with baked-on epoxy powder-coat finish.
End Caps: Molded-in, colored thermoplastic end caps that attach to the body end panel.
Mounting Hardware: Plastic end caps made with integral hooks to attach to the front lip of the overhang storage shelf. Rear mounting brackets are spring steel plated and are attached to the fixture body.
Lens: Prismatic lens is standard. An optional batwing lens is available.
Power Cord: 48" (1219mm) black power cord with grounded terminal. An optional 9' cord is available.

Task lights are UL Listed and certified for use in Canada by UL. Ballasts are low power factor magnetic, high power factor magnetic, high power factor step magnetic dimming, electronic, or electronic dimming. Lamps are T8 octic low mercury with a 3500K color temperature.

Overhead Storage Task Lighting
Task lights have an Energy Star®-rated electronic ballast. They have a T8 3500K Tri-Phosphor Octic lamp with low mercury content and are rated for a 20,000-hour life. Lamp wattage is 17W for 30" (914mm)-wide lights, 25W for 42" (1067mm)-wide lights, and 32W for 54" (1372mm)-wide lights. A 6' long, black, cord with a three-prong conductor plug is factory-installed on the right side and may be field-installed on the left side of the 42" (1067mm) and 54" (1372mm) units. An optional 9' cord is available. The Chicago version has a plug with an integral 3-amp re-settable circuit breaker. Lights are standard with an acrylic lens featuring a pyramid-shaped prism pattern that reduces reflected glare. An optional batwing lens consisting of a series of prisms that distribute light patterns to the left and right of the observer and further reduces reflective glare is available. Lights are listed by Underwriters Laboratory for use in the United States and certified by UL to Canadian Standards. Task lights include mounting brackets for attaching under shelves.

For more information download the complete

RACE Systems North American Price List (.pdf 18 MB)