**Pathways Post and Beam**

**Post and Beam** is a modular and reconfigurable system that supports the space definition and technology access needs of individual users and teams.

- **Specifying, pages 104–128**

**Actual Dimensions**

<table>
<thead>
<tr>
<th>Post</th>
<th>Beam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth (thickness)</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Width</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Height</td>
<td>33&quot;, 40½&quot;, or 93¼&quot; 8½&quot;</td>
</tr>
<tr>
<td>Leveling mechanism range</td>
<td>3&quot; N.A.</td>
</tr>
</tbody>
</table>

**Corner troughs** attach to beams at intersections to provide a smooth visual transition for cables and power harnesses when bridging beams.

**Horizontal overhead beam trough** provides horizontal power and cable management at the overhead beam location.

**Beams** span between posts and can be used in either overhead or fence applications.

**Beam filler trough** manages cables where cross beams are not present.

**Integarl T-slots on beams** support PolyVision Huddleboards (with Huddleboard adapter brackets), shelves, and power and cable management.

- **See PolyVision Commercial Series Markerboard Specification Guide.**

**Shelves** are additional storage surfaces that sit above the worksurface. The shelves are 33¼" high.

**Horizontal fence tubes** provide power and cable management at the fence beam locations.

**Vertical post tubes** provide power and cable management at the post.

**In-fill** is a fabric screen that stretches from overhead beam to floor, from overhead beam to fence beam, or from fence beam to floor.

**Technology hubs** deliver power and cable access to the user.

**Post** attaches to beams in in-line, L-, T-, X-, or Y- (120°) configurations.

**Hub mounts** are required to attach hubs to 33"H or 40½"H posts.

**Top caps** are provided with 33"H and 40½"H posts only. Top caps must be ordered separately for 93¼"H posts.

**Posts** must be used at each connection of two beams.

**Screens** can be mounted above or below beams for privacy or modesty.
**Product Details**

**Beams** are interchangeable for use in overhead or fence applications. Beams connect at desk height or standing height to form fence applications. Fence applications require the beam to be inverted prior to connection with a post.

**Overall height of post and beam** is 93 1/2" with the leveling mechanism in the lowest position. Clearance from floor to underside of beam is 85"H.

**Integral T-slots on beams** accept accessory mounting bracket, style number BAM8, or customer-supplied 12 mm T-nuts for attachment of customer-supplied accessories.

**Maximum load on overhead beams** is 100 pounds. Maximum load on fence beams is 1000 pounds. Maximum load on shelves is: 30" shelf—83 pounds 36" shelf—99 pounds 42" shelf—116 pounds 48" shelf—132 pounds

**Leveling capability** is provided by 3" adjustability between the post and base extension (included with post). A height-adjustment jack is available through Service Parts (946800103SR) for leveling ease on large installations.

**Post base shims** ordered separately, can be used under post base to raise to the appropriate carpet level.

**Posts** may be field cut to any dimension. Posts cannot be stacked.

**Beams** may be field cut to any dimension. An anchor block drilling fixture must be ordered through Service Parts (946800102SR) to place new anchor block holes in the correct position after cutting.

**When attaching screens** to Post and Beam fence, remember to order attachment hardware separately.

**Fence dust covers** can be inserted into top T-slot on fence beam. Dust covers come in 10-foot lengths and can be cut to size in the field.

**In-fill width in beam-to-floor applications** is determined by number of hubs. In-fill is fixed within the opening; it cannot move. Beam-to-floor in-fill attaches to post.

**In-fills in beam-to-desk-height fence applications** may be any width smaller than the beam width. Beam-to-desk-height fence in-fill attaches to fence. Tip: There is no standard in-fill for beam-to-standing-height fence applications.

**In-fill hardware packages** are available to support custom graphic fabric in-fills, ordered separately from Designtex. Call Designtex at 1.800.221.1540 or contact your local Designtex representative.

**Shelf cable management and storage tray** organizes cords and other items. One tray can be used for one shelf, or one tray can span two shelves located on opposite sides of a beam. Tip: In one-shelf applications, tray extends over beam edges and may affect installations on the opposite side of the shelf.
Connections

Wall start bracket can be used to attach a beam to a building wall or column. Wall start brackets allow for 90° connections only. Wall start protrudes 2 1/8" from wall.

Connection of two beams requires the use of a post.

Post and Beam requires a minimum of an L-configuration (90° or 120°) for stability, consisting of three posts and two beams of any size. For applications using a large post base, no more than 16 feet of beams may be placed in line without a 90° or 120° return. For applications using a small post base, a minimum of 5-foot beams are needed in both directions for stability; if shorter beams are necessary, use four posts and three beams. In L- and T-configurations, shelves should be installed on the inside; if installed on the outside, anchoring may be required. If more stability is required, posts with large bases should be specified.

Posts must be anchored (anchors not included) to the floor in seismic zones 3 and 4 when 93 1/2" H overhead beams are used. When attaching non-standard components to beams, consult with project architect or structural engineer to determine if posts must be anchored in zones 1 and 2. Floor anchors (not included) must be 3/4" x 1 1/16".
Tip: Posts with small bases cannot be anchored to the floor. Posts with large bases should be specified when floor anchoring is required.

Beam attachment to Pathways Technology Wall, Answer, Montage, and Kick is at desk height. See each panel solution’s specification guide for fence connector and stability guidelines. Exception: Fence connector and stability guidelines for use on Kick are not included in the Turnstone Specification Guide. Use connector CFENCELC or CFENCERC and Answer stability guidelines when attaching fence to Kick.

Seismic zone 3 and 4 requirements are:
• Consult with local building code officials for specific code requirements applicable to your installation.
• Consult with the project architect or structural engineer to determine the concrete flooring specifications for your installation site.
• Remove carpet and install post base shims before attaching the post to the floor in order to ensure a solid connection. Order enough 3/4" post base shims to match carpet height.
• Recommended for use on concrete floors only. Posts must be anchored to the floor.
• Use three anchors per post.
• Follow the anchor manufacturer’s recommendations for proper installation.
• Special inspection per ICBO 1701.5 is required in seismic zones.

Posts and beams connect to form in-line, L-, T-, X-, or Y- (120°) connections.

Maximum beam length for fence applications is 10'.
Post and Beam is not designed to attach to raised floors. The flooring manufacturer must address additional bracing and structural accommodations. It is recommended that a structural engineer work in conjunction with a flooring manufacturer to insure the anchor performance criteria can be met.

A structural engineer in Zone 3 and 4 areas must evaluate the connection of Post and Beam to architectural walls. Additional bracing or building modifications may be required.

Steelcase is not responsible for consultation fees.

Pathways Post and Beam was evaluated and tested in accordance with the applicable 1997 UBC and 2000 IBC criteria for seismic zones. Further worst case configurations were developed and analyzed by Degenkolb (job number A10506.01) in anticipation of ICBO submittal.

**Wiring and Cabling**

**Technology hub** comprises nine simplex receptacles available in multiple circuits. The system has a standard 8-wire, 4-circuit electrical system available in wiring configurations of 3+1, 2+2, and separate neutrals. Hubs are 12½" in diameter. Maximum of four hubs are allowed per feed. Communication Ports must be supplied and installed by the customer. Hubs can be modular connections or hardwired. Hubs are either terminating (end of run) or pass through (middle of run).

**Modular terminating hub**

**Hardwired pass-through hub**

**Modular and hardwired feeds** have varying lengths.

**Hub mounts** are required to attach a hub to the top of a 33½" or 40½"H post.

**Multiple inserts on technology hubs** handle all cable routing situations. All possible combinations of inserts are provided with each hub.

**Post and Beam** is designed to accommodate modular power or a hardwired circuit. Hardwired circuits are needed for lights and all Post and Beam applications in the city of Chicago.

**Technology hubs with modular power** connect to each other using standard Pathways 8-wire, 4-circuit modular harnesses, feeds, and connectors. Tip: Remember to order connectors which must be used between harnesses.

**Power and data strips** attach to the side slot on fence and include three simplex receptacles and space for two data or communication ports (to be supplied by the customer). They are available with either an 8'-long cord with plug or with a 6'-long modular harness in wiring configurations of 3+1, 2+2, and separate neutrals.

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**Cable management for technology hubs** is supported by vertical tubes in two positions: desk height (33") or standing height (40½"). Hubs may be installed at any height, but vertical tubes must be field cut.

**Power and data strips with modular harness** can be attached in-line using a branching harness to harness connector.

**Pathways Post and Beam, continued**
**Vertical post tubes**

must be used to conceal power harnesses and communication cables routed to technology hubs. The height of the vertical tube is dictated by the location of the hub. Branching harness-to-harness connectors do not fit in vertical tubes.

**Horizontal fence tubes**

provide horizontal power and cable management at fence beam locations. Specify tube to match width of fence beam. The bottom of the fence tube is 6 1/4" below the bottom of the beam.

**Cord/cable manager clips**

are available for low-capacity cable management under a fence-height beam. Maximum capacity of the clips is two standard power cords and two standard data cables.

**Beam filler troughs**

are used to manage cables where cross beams are not present.

**Cable capacity for troughs**

is 30 category 5 cables with two power harnesses or 50 category 5 cables with one harness. Cable capacity for fence tubes and vertical post tubes is 30 category 5 cables with one power harness or 50 category 5 cables with no harness.

**Horizontal overhead beam troughs**

provide horizontal power and cable management at the overhead beam location. Overhead beam troughs must always connect to a corner trough on each end.

**Corner troughs**

attach to overhead beams at intersections to provide a smooth visual transition for cables and power harnesses.

**To route cables from an overhead beam to a vertical post,** specify a trough, corner trough, and vertical post tube.

**To close beam ends,** make sure to specify enough corner troughs and beam filler troughs.

**To route cables overhead in 90° applications on the outside of the corner,** specify three 90° corner troughs and two beam filler troughs.

**To route cables overhead in 90° applications on the inside of the corner,** specify three 90° corner troughs and beam filler troughs.

**Beam-to-beam cable routing**

is possible in applications where cross beams are present. Beam filler troughs are not required. Cables pass over the top of the beam.

**Ceiling infeed tubes**

bring power and cabling from the ceiling to the top of a 93 1/2"H post. Corner troughs must be specified for a smooth transition to adjacent tube or troughs.

**Communication access**

is supported through the use of Decora mounting strap style faceplates which can be installed underneath the hub cover. The faceplates must be installed by the communications contractor. A hub can house three faceplates if power and cabling is routed into the top of the hub—or four faceplates if no power and cabling is routed into the top of the hub. The number of jacks (two or three) per faceplate varies by manufacturer.

**Decora mounting strap-style faceplates**

are typically used for application within an electrical junction box and covered with Decora style electrical faceplates.

**Post and Beam assembly instructions**

can be found on the Steelcase dealer Web site, in2.steelcase.com.
Pathways Post and Beam

**Surface Materials**

**Post**
- 8043 Clear Anodized Aluminum only

**Beam**
- 8043 Clear Anodized Aluminum only

**Post top cap**
- 6694 Slate plastic only

**In-fill**
- 5477 Tech White fabric only

**Technology hub**
- 4752 Steel paint only
- 6644 Fusion Dark plastic only

**Horizontal fence and vertical post tubes**
- 6644 Fusion Dark plastic only

**Horizontal overhead beam troughs**
- 4799 Platinum paint only

**Corner troughs and beam filler troughs**
- 6644 Fusion Dark plastic only

**Shelves**
- Paint

**Laminae screens**
- 2101 Frost
- 2102 Bisque
- 2103 Dove
- 2104 Charcoal
  **Tip:** Laminae is not a markerboard surface and should not be written on with markers or dry-erase markers.

**Fence beam dust cover**
- 8043 Clear Anodized Aluminum only

**Knit screens**
- B902 Soft White
- B903 Fog
- B904 Sand

**Screen supports**
- 4799 Platinum paint only

**Curtain hooks**
- 6994 Slate plastic only

**Cord/cable manager clips**
- 6994 Slate plastic only

**In-line post junction cover**
- 4799 Platinum paint only

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**Application Topics**

**Post and Beam dimensioning** must be thoroughly understood for proper planning. Nominal dimensions are center-to-center of post. Worksurface space is less than nominal. Full overall width dimension is more than nominal (see drawing).

**Check ceiling height**
when planning for Post and Beam. Overall height of Post and Beam is 93½” with the leveling mechanism in the lowest position and 96½” in the highest position. Clearance is 85” with the leveling mechanism in the lowest position, and 88” in the highest position.

Pathways Post and Beam Solutions Specification Guide

Pathways Post and Beam, continued