A.I. Healthcare

200

application guide

01.27.2025

what is A.I. Healthcare

A.I. Healthcare is a full-height architectural wall system tailored to create select healthcare environments. The wall provides various full height wall and door options, plumbing access, medical accessory mounting solutions, and a full range of infection and dust control gaskets.

Modules are available in single wide, double wide, and module for plumbing use.

- A.I. Healthcare readily furnishes privacy requirements in spaces like exam rooms, infusion clinics, consultation and telehealth offices, and dividers in waiting rooms.
- A.I. Healthcare is designed so that its simple, clean aesthetic blends seamlessly with existing healthcare environments and complements building interiors.
- Array of gasket seals allows the system to put cleanliness as a priority.
- Array of data and electrical solutions give power options to each individual office.



planning possibilities - typical examination rooms

A.I. Healthcare retains the highest level of patient to doctor privacy while an expansive catalogue of available options ensures all the necessary needs of a examination room is fully integrated into the architecture.



planning possibilities - dentist

A.I. Healthcare with the possibilities of back-to-back plumbing and cabinet mounting permits new design possibilities in new applications



Back-to-Back cabinets are supported in A.I. Healthcare and permits multiple rooms sharing similar layouts for prostient application and conc practical application and space planning freedom.

extensive line of wall mounted cabinet solutions that will accommodate even the most challenging storage needs

surface solutions, and are a part of the wall.

planning possibilities - telehealth & office

A.I. Healthcare offers a wide variety of communication and power options, giving the options and flexibility needed for specific power and networking requirements for Telehealth use.



Teknion offers a wide range of furniture solution that fits specific requirements of the consultation room to ensure patients and medical staff are in a comfortable environment

site planning

site planning

When Specifying A.I. Healthcare, the following site condition steps and rules must be followed.

Step 1 – Site Condition

Before starting to plan with A.I. Healthcare, the following site specifications are needed for smooth integration.

- A. The General Contractor shall hold the floor within +1" of the identified high spot in the installation site
- B. The ceiling shall be flat and level, with a tolerance of 1/8" over installation site
- C. If 'A' and 'B' cannot be met, then the walls must be broken up
- D. Plumbing, HVAC, lighting and electrical supplies must be considered, and re-routed as necessary prior to installation to ensure these are appropriately placed around the A.I. Healthcare walls

Step 2 – Measuring & Specifying

installation site measurements

Use a laser to survey the installation site to find the high and low spots in the floor and ceiling. Floor to ceiling measurements are to be recorded every 12' square. If the floor is unfinished, the thickness of the floor must be considered in the calculations.



site planning (continued)

specifying walls for installation site

Measure nodes in installation site as shown in picture below, and mark down on Survey sheet.

Use the survey sheet measurements to identify the Low Spot (maximum number) and High Spot (minimum number).



• The 'High spot' is the the Specified System Height

• The 'Low spot' is used to confirm the site condition by subtracting from the High spot

• When specifying, the 'high spot' is rounded down to the nearest whole number

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Example: High Spot is identified as 108 13/16"
Low Spot is identified as 109 1/2'
Specified System Height: 108"
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• Use the following formula to determine compliance to site condition

Low Spot – High spot = floor variance

To confirm site condition: 109 1/2" - 108 13/16" = 11/16", which satisfies the site condition

• If the site condition cannot be met, then the floor must be fixed

specifying doors for installation site

More nodes are required in the door swing area to specify the appropriate door increment for a tailored fit.

Use a laser to survey the door swing area:

- Door Swing Area is the half circle area, with the hinge node as the center, and the jamb line as the radius
- Measure every node in the door swing area
- Both Strike and Hinge Nodes to be measured separately



Door height measurement points

site planning (continued)

specifying door increments

The Strike Node and Hinge Node measurement is to define the increment needed at the installation site of door.

- The height of the door is constant at 84" Nominal
- Door Increments are used to compensate for installation site's specific condition
- The purpose of the door increment is to maintain the gap under the door at 1/2'



• Use the following formula to determine the corrective dimension:

Minimum node between Strike and Hinge Nodes – Specified system height = corrective dimension.

- Using the following table, identify the correct increment needed for the door, per the Corrective Dimension
- Example: Minimum node between Strike and Hinge Nodes: 109-1/2" (Hinge Node in Example above)

Specified System Height: 108" Corrective dimension: 109-1/2" - 108" = 1-1/2" Increment required for door: G

• More examples are available in the **Doors Section**

Increment													
Corrective Dimension	Α	В	С	D	Е	F	G	Н	I				
0" to + $\frac{1}{16}$ "													
$+\frac{1}{8}$ " to $+\frac{5}{16}$ "													
$+\frac{3}{8}$ " to $+\frac{9}{16}$ "													
$+\frac{5}{8}$ " to $+\frac{13}{16}$ "													
$+\frac{7}{8}$ " to $+1\frac{1}{16}$ "													
$+1\frac{1}{8}$ " to $+1\frac{5}{16}$ "													
+1 ³ / ₈ " to +1 ⁹ / ₁₆ "													
$+1.5\%$ " to $+1.13/_{16}$ "													
+1 7/8" to +2"													

The door swing area nodes measured are used to ensure smooth operation of the door.

• Nodes in the door swing area should not be less than 1/4" of minimum node on Jamb Line

• Every door swing area will be different and will require each door swing area to be measured to ensure compliance and reliable performance



site planning (continued)

specifying wall modules

All modules will require the Framing Components, Vertical post packages, a Horizontal Rail package, and Fascias to form the basis of your A.I. Healthcare room.

- On all single walls, fascia selection will determine the Vertical Post configuration automatically
- Vertical Post Package Double and Plumbing have different applications and are interchangeable based on plumbing needs
- Consider future plumbing needs when specifying your wall system to minimize future labor
- For more detailed information, refer to Vertical Post Section for more information



add-on components

Specific add-on components have their own unique restrictions

- Consider future plumbing needs when specifying your wall system to minimize future labor.
- Be aware of all aspects of A.I. Healthcare's Walls have specific restrictions and should be adhered to during the planning phases of your project.

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fascias

F H M Solid Fascia – Monolithic

F H S M 1 Solid Fascia –Segmented Monolithic (Level I) F H S M 2 Solid Fascia –Segmented Monolithic (Level II)



frame kits & components



frame kits & components









doors



gaskets

FHGB Base Gasket

FHGN Inside Corner Gasket

FHGR Reveal Line Gasket





supports





equipment rail & accessories

FHRE Equipment Rail

FHRA Universal Mounting Adapter





lighting, electrics & communications



lighting, electrics & communications



wall module overview

Wall modules are the basics of framing A.I. Healthcare into your space, the walls in A.I. Healthcare are tailored to fit your spacial and aesthetic needs.



Framing

Ties the wall structure to the building architecture.

Fascia Aesthetic choices to match your space and purposes.

Horizontals

Internal frame structure, drives the width of the module.

Verticals

Internal frame structure, ties into the floor and ceiling.

Framing Ties the wall structure to the building architecture. purposes.

Fascia Aesthetic choices to match your space and

Horizontals

Internal frame structure, drives the width of the module.

Verticals

Internal frame structure, ties into the floor and ceiling.



Horizontals

Internal Frame Structure with clearance for plumbing.

Fascia

Aesthetic choices to match your space and purposes.

Verticals Internal frame structure, ties into the floor and ceiling.

Single Wall Module

Forms the basis structure that defines your space, and are used for doorways and when glass is required.

Double Wall Module

Used to transition the plumbing wall to the remaining walls in your space, it also permits horizontal runs of plumbing using the appropriate vertical post package.

Plumbing Wall Module

A version of the double wall module that permit the vertical pipe to be integrated into your Healthcare rooms

door module overview

A.I. Healthcare offers a variety of tailor fitted door options that meet a range of privacy and functional needs.



Solid Door

Solid HPL doors maximizes accessibility and durability.



Jamb

Structure of the door, and the framing for the wall module.

Leaf

Stylish and durable finish for the healthcare use.

Hardware

Wide selection for durable and long lasting use.

Solid with Glass Insert Door

HPL doors, with an integrated glass insert in 3 sizes, that supports A.D.A. requirements.

connections overview

Plan your space through A.I. Healthcare's flexible transition solutions.





Wall Module Double Wall shown

Wall Module Plumbing Module shown

Three-Way Transition Wall management at a Three-Way intersection

Three-Way When three walls join together.



Wall Module Monolithic single shown

Wall Module Plumbing Module shown

Four-Way Connections Centralized connection for when four walls intersects

Wall Module Double Wall shown Four-Way At a four-way intersection.

add-on overview

A.I. Healthcare offers a variety of solutions to support Healthcare's needs and uses.



application guide

framing introduction

Framing components form the foundation to which A.I. Healthcare interacts with building architecture, including the ceiling framing and clips, and vertical connections to the walls, these framing components form the outer edges of your A.I. Healthcare walls.



ceiling extrusion details

The Ceiling Channel and Frame Beam form the foundation of the A.I. Healthcare

- Ceiling Channel is affixed to the ceiling, and it is the first step of installation, it serves as the connecting point to building's ceiling
- The Frame Beam serves to bridge between the rest of A.I. Healthcare's wall system, and it is connected to the Ceiling Channel
- Plumbing module uses a unique ceiling extrusion, see Horizontal Section for more details



Note: Plumbing module uses its own dedicated Ceiling Channel



Ceiling Channel

- Connects the A.I. Healthcare wall to the ceiling
- Designed to minimize any dust accumulating edges, while improving STC between rooms
- Is available in 3', 4', 6', 8', 10' lengths only, cut on site
- Used in both single and double wall
- Plumbing module uses its own ceiling channel and must be excluded in calculations
- Channel must be flat to the ceiling



Ceiling Frame Beam

- Provide structure and holes for the glass clips and vertical post bracket
- Is an aluminum beam that serves as the structure to support the vertical posts
- Is available in 3', 4', 6', 8', 10' lengths only, cut on site
- Used in both single and double wall
- Plumbing module does not use a ceiling frame beam
- Fits in the envelope of the Ceiling Channel

ceiling clip details

Ceiling Clips allow the A.I. Healthcare walls to be appropriately supported on T-Bar drop ceilings

Ceiling Clips (FHCS)

- Clips to support the ceiling extrusion in a T-Bar ceiling installation site
- Various sizes and specifications are available for common T-bar styles
- Reinforcement Plank is available to support where T-Bar do not line up with the extrusion



ceiling clip details (continued)

Ceiling Clips are available for a wide variety of ceiling types, refer to the below chart for the best match to your space.



• 9/16" and 15/16" Ceiling Clips (FHCS2)is required for additional support above doors and at corners.

• Reinforcement Plank (FHCS1) is 5' long.

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ceiling clip details (continued)

The following should be considered when planning with Ceiling Clips.



• 9/16" and 15/16" Ceiling Clips (FHCS2)is required for additional support above doors and at corners.

• Reinforcement Plank (FHCS1) is 5' long.

wall starts & wall finished end details

Wall Starts connects A.I. Healthcare wall systems to existing building architecture, and Wall Ends are used in single wall where there is no connection to another wall run.



Single

Adjustable Wall Start (FHCJW)

- · Adjusts to building walls when they are out of plumb
- Adjustable Wall Start: 1-3/4" nominal +3/8" to -3/8" and adds to the wall run's total length
- Extrusion to be cut on site, the vertical are adjusted to fit.
- The Wall Start does not route electrics, communication, or plumbing from the building architecture wall
- Wall start configuration (single or double) must be specified
- · Extends from floor to ceiling extrusion

Wall Finished End (FHCEW)

- Is used to cap the end of a wall run where there is no connection to another wall run
- Cut to Size on site
- Extends from floor to ceiling.
- Support single walls only, double walls must transition at a two, three, or four-way connection
- Wall finished end adds 1" to wall run length

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wall starts & wall finished end details (continued)

The following information when specifying your A.I. Healthcare framing.

Adjustable Wall Start will add 1 3/4" nominal, and can adjust up to +/- 3/8" to plumb, adjust the remaining wall widths to ensure uniformity.



Adjustable Wall Start and Wall Finished Ends interaction with the ceiling extrusion differs.



vertical post introduction


vertical post package - single details

The Vertical Post Package extends from finished floor to finished ceiling and is the vertical support of the A.I. Healthcare frame.

- Vertical Post Package Single Wall forms the basic vertical structure of A.I. Healthcare wall system and supports all fascia combination, and door modules
- The system allows for adjustment of +2" / -0" at the bottom, and it is fixed at the top



Vertical Post Package Single (FHCPA)



vertical post package - double details

The Vertical Post Package - Double provides the vertical supports on non plumbing portions of the plumbing wall.

- · Provides the continuation of a wall run when plumbing across modules is unnecessary
- Designed to be fitted inline to a Plumbing Module, Monolithic fascia only
- The system allows for adjustment of +2" / -0" at the bottom, and it is fixed at the top, and are adjusted separately



Vertical Post Package Double (FHCPA)



vertical post package - plumbing details

The Vertical Post Package - Plumbing is specifically design to accommodate cross-fascia runs of plumbing.

- Vertical Post Packages Plumbing are Vertical Posts designed to accommodate in-wall plumbing that extend beyond the module of the vertical pipe
- The system allows for adjustment of +2" / -0" at the bottom, it is fixed at the top, and they are adjusted separately
- Two cut out heights are available for common stub-out heights
- Cut out heights accommodate drain slopes for horizontal runs over 6', the drain itself does not need to be centered in the plumbing module
- Pipe Braces are designed to support horizontal pipes between verticals



Vertical Post Package Plumbing (FHCPB)





horizontal introduction

Horizontal Rails provide the structure across verticals .



horizontal rail package - single details

The Horizontal Rail Package provides the structure at the bottom and middle of the wall.

• Horizontal Rail packages contents are specific to fascia selection, and it is shared between the inner and outer elevations

- Includes the necessary horizontal supports needed to structurally support the Vertical Posts and Fascia selection
- Segmented option is used for both Solid and Glass Fascias
- Actual Module Size: Nominal + 1/8"



For Segmented Monolithic and Segmented Glass

horizontal rail - double details

The Horizontal Rail Package - Double, it provides the horizontal supports necessary for the walls.

- Includes the necessary horizontal supports needed to structurally support the Vertical Post Package Double
- The Double Package does not support the plumbing in any capacity, any vertical pipe must utilize the Horizontal Rail Package -Plumbing
- Accommodates Monolithic Fascias only
- Actual Module Size: Nominal + 1/8"



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horizontal rail package - plumbing details

The Horizontal Rail Package - Plumbing permits the vertical passage of plumbing inside A.I. Healthcare walls

- Horizontal Rail Package Plumbing consists of the components needed to integrate vertical plumbing in A.I. Healthcare Walls, and is available in select sizes
- Accommodates up to 3" Nominal Diameter pipes
- Can use either version of the Vertical Post Package, and cannot be installed adjacent to another Horizontal Rail Package -Plumbing
- Accommodates Monolithic fascias only
- Plumber to supply own hardware and to secure the vertical pipes to horizontals
- Actual Module Size: Nominal + 1/8"





horizontal rail package - plumbing application

The following information must be considered when planning plumbing requirements.

- · Horizontal Rail package Plumbing has three configurations, and have specific use case for each
- Must be installed individually, they cannot be installed adjacent to another Horizontal Rail Package Plumbing
- If plumbing access is required in adjacent panel to the Horizontal Rail Package Plumbing, the Vertical Post Package Plumbing provides the necessary cut outs to provide plumbing to adjacent panels, for drain slopes for horizontal runs over 6'
- Plumbing fixtures can be installed back-to-back

Inline

Installed inline with adjacent non Plumbing Package

- Horizontal Rail Package Plumbing cannot be placed side-by-side. Use a Vertical Post Package
- Plumbing if plumbing must travel horizontally into the next module
- Plumbing sources can share a single Horizontal Rail Package Plumbing



Intersection

Used at a Two-Way or Three-Way intersection, where the Double wall will transition into a Single wall.

· Plumbing cannot be transferred through any Transitions



Wall Start

Used when the vertical pipe is located next to building's architecture.

- · Plumbing cannot be transferred through the wall start
- · Plumbing Ceiling Extrusion will fit on top of Wall-Start



fascia introduction

Fascias are used to create the faces of A.I. Healthcare walls and are configured into two wall types depending on Fascia selection.

Solid Fascia - Monolithic

- Floor to Ceiling Fascia
- 96" 120" Nominal height
- Available for Single, Double and Plumbing Walls



Solid Fascia - Segmented Monolithic Level 1

- 84" Nominal height
- Must be used with Segment 2 selection
- Available for Single walls only

Solid Fascia - Segmented Monolithic Level 2

- 12"-36" Nominal height
- Must be used with Segment 1 selection
- Available for Single walls only

Glass Fascia - Double Square Corner

- 12"-36" Nominal height
- Must be used with Segment 1 selection
- Available for Single walls only

Three-Way 180 ° Corner Cover

- 96" 120" nominal height
- 4" for single wall, and 8" wide for double wall
- Functions as a cover for various forms of single and double wall transitions

Aluminum Fascia Kit

- 96" 120" nominal height
- For Single wall only, 6" nominal width
- Functions as a cover for various single wall transitions





fascia introduction

Fascias are used to create the faces of A.I. Healthcare walls and are configured into two wall types depending on Fascia selection.

fascia heights

- With Systems Height (SH), calculate height dimension X" for a fascia configuration (M1, S2, SM1, SM2)
- See if the product code's Fascia Height Range satisfies the calculated height dimension X"



Fascia Description	Monolithic	Segmented Monolithic 1	Segmented Monolithic 2	Segmented Glass 2	
	Fascia Height Calculation (inch)				
	X"= SH	X"= 84"	X" = SH"- 84"	X"= HS"-84"	
	Fascia Height Range (inch)				
Solid	96" - 120"	84"	12" - 36"	n/a	
Glass	n/a	n/a	n/a	12" - 36"	

fascia widths

Fascia Description	Fascia Width Range (inch)		
Solid Monolith	12" - 48" (offered in 1/8" increments)		
Double Glass, Square Corner	12" - 48" (offered in 1/8" increments)		
Solid Segmented Monolithic	12" - 48" (offered in 1/8" increments)		

monolithic fascia details

Monolithic Fascias are used on all wall types and provide a one piece clean face aligned with cleanliness needs of healthcare

- Monolithic Fascias are a full height solid fascia, applicable to all A.I. Healthcare wall types
- Fascias are built-up to complete the front and back elevation of a wall module and solid Fascias do not need to be identical
- Monolithic Fascias are mounted on the Vertical Posts using Fascia Clips
- Power and Communication receptacle cut outs can be specified and pre-cut
- Any cut outs for plumbing required must be done on site by installers, refer to the installation guide for more details
- A light switch can be installed on solid Fascias. For more information on the Light Switch, see Electrical Section for more details
- No structural members are included in the fascia kit, they are specified separately
- Fascia Locks are available for one side of the fascia if there is a need for more secure connection

Fascia Clips are pre-installed on the Fascia, and clicks into Fascia connectors on the Vertical Posts

Expansion Casework Cabinets are hung onto the Fascia using Expansion Casework Cabinets Wall Supports, and are supported by the Cabinet support Brackets by drilling holes through the Fascia, holes are cut on site.

Vertical pipe cut outs must be made on the Fascia.



Solid Fascia - Monolithic (FHM)



solid fascia - segmented monolithic details

Segmented Monolithic Solid Fascias are used in doorways as a means to provide an un-interrupted reveal line on doorway walls

- Segmented Fascia is divided into two sizes, typical application is on doorway walls where the door module reveal can be carried across
- Fascias are built-up to complete the front and back elevation of a wall module and solid Fascias do not need to be identical
- Applicable on single walls only
- Power and Communication receptacle cut outs can be specified on segment 1 only
- A Light Switch can be installed on segment 1 Fascias. For more information on the Light Switch, refer Electrical Section for more details
- · No structural members are included in the fascia kit, they are specified separately



Fascia Clips' position will vary based on configuration

Solid Fascia - Segmented Monolithic (FHSM_)



glass fascia - segmented monolithic details

Glass Fascia segment 2 provide light transfer aspect for the benefit of patient and staff's health.

- Glass Segmented Monolithic Fascias are double glazed aluminum framed alternative to segment 2 Fascia finish
- Glass Fascia is one complete assembly, and is a single module for both sides of the wall
- Glass Fascias do not use Fascia Clips and uses Glazed Fascia Mounting Clips instead, refer to the installation guide for details
- Applicable on single walls only
- No Power, Electrical routing, or plumbing can be made through any Glass Fascias
- Available in tempered and laminated glass finish



Glass Fascia - Segment 2 (FHSG_)



fascia finishes

The following finishes are available on A.I. healthcare.

Solid Fascias

Cleanable and water resistant.

- Available 12" 48" wide nominal in 1/8" increments
- Height availability based on fascia specified
- 96" 120" height, 1" increments for monolithic
- 84" height only, for segmented 1 fascia
- 12" 36" height, 1" increments for segmented two fascias
- Available in Fascia Laminate (LPL) and Foundation Laminates (HPL)
- Accepts electrical boxes and switches on Monolithic and Segmented Monolithic 1
- Monolithic Fascia used on all wall types, segmented Fascias are used on single wall type only
- Grain direction is vertical



The illustration above demonstrates the grain direction for Fascias.

Glass Fascias

Provide access to natural light.

- 6mm Double Glass, Square profile
- Available in 12" 48" width in 1/8" increments
- Available 12" 36" height in 1" increments
- Glass options: Tempered or Laminated
- Tempered Glass Option:
- Both pane will be tempered
- Glass Finish: Clear, Ceramic Frit
- When Clear is specified, both panes of glass will be clear
- When Ceramic Frit is specified, only outer glass will be ceramic frit, the inner is clear
- Laminated Glass Option:
- Inner pane will be tempered glass, outer will be laminated glass
- Glass Finish: Clear
- Not available on Double or Plumbing modules
- Frame finishes in standard A.I. interiors finishes in Anodized or Painted



Segmented elevation shown



Section of Square Profile Glass Fascia

filler panel details

The Filler Panel is used when an A.I. Healthcare wall surface needs to be cut away to fit wall irregularity, usually at the perimeter of the building.

- Includes internal framing needed to tie the Filler Panel between the building architecture and the A.I. Healthcare wall system
- Available for single and double wall
- Available in Monolithic configuration only
- Can be cut away to a maximum of 6" from floor to ceiling. Amounts greater than 6" can be cut away above and below the horizontal rails
- Filler Panel cannot be used to run plumbing pipes or electrical
- Table below to determine the best size of filler panel for your application



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transitions introduction

A.I. Healthcare allows 90°, and 180° Transitions in Two-Way, Three-Way and Four-Way configurations.

Two-Way Transition

- Two-Way Transitions allows two A.I. Healthcare walls to join together in a 90° angle
- Double Wall Transition to Single Wall shown



Three-Way Transition

- Three-Way Transitions allows three A.I. Healthcare walls to join together in a T-junction
- Double Wall Transition to Single Wall shown



Four-Way Transition

- Four-Way Transitions allows four A.I. Healthcare walls to join together in a X-junction
- Double Wall crossing a Single Wall Four-Way shown



two-way 90° corner transition details

Two-Way Corner Transitions is when the wall run turns 90° to another wall run.

Two-Way transitions:

- Two-Way 90° Corner Cover attaches to the exterior of the Vertical Posts to provide a finished Transition at 90°
- Access is required to the back of the corner to secure the cover onto the walls, refer to the installation guide for more details
- Length: 96" 120" (in 1" increments), and is trimmed on site
- Finishes: Clear Anodized or painted



Two-Way 90 ° Corner Cover (FHP2C)



three-way transition details

Three-Way Transition is when a thru wall is to terminate a third wall at a T intersection.

Three-Way Transitions:

•Corner Connection Hardware is used to manage Three-Way Transitions internally, available in Single or Double configurations

- Three-Way 180° Corner Cover is available for Single and Double Three-Way Transitions. The Aluminum Fascia Cover is available for Single Three-Way Transitions
- Three-Way Connection Hardware comes with a short length of Base Channel, and is used to form a continuous Channel for the Vertical and Base Gaskets to be utilized



four-way transition details

Four-Way Transitions are when walls runs intersect.

Four-Way transitions:

- The Corner Connection Hardware is used to manage four-way transitions internally, available in Single or Double Configurations
- In a Single Cross Single wall four-way transition, a Corner Connection hardware four-way is needed to join the four vertical posts together
- Any double wall transitions to single wall four-way transitions will use different Corner Connection Hardware and may require additional Fascia Covers. Refer to the below configurations for specifics required



three-way transition connections

A.I. Healthcare allows transition between the A.I. Healthcare system to Altos systems. Note the following restrictions

A.I. Healthcare Transition Kit (FH3A)

- In situations where it is planned to place an A.I. Healthcare room next to a standard Altos room in Three-Way Transition
- Transition Fascia is only available in Aluminum and are cut to size on site
- Shared wall between Altos and A.I. Healthcare will use A.I. Healthcare wall system
- Transfer permitted at Three-Way Single Wall only. Double Wall Transfers is not possible, plumbing plans that fall in the Transition Wall must be re-routed
- All Reveal Line gaps on the A.I. Healthcare side should have a Reveal Line Gasket installed



gasket introduction

Gaskets are used to seal gaps between the wall and/or building to provide improved acoustic and cleanability.



base gasket details

Base Gasket forms a seal between the A.I. Healthcare walls and the floor.

Base Gasket

- · Light and sound seal between the bottom of the wall system and the finished floor
- May conceal minor height variations in floor surfaces
- · Mounts with a mechanical connection to the Base Channel, and it is taped to the fascia
- Length: 10'
- Finish: Ebony



Flexible fin - seals against floor

inside corner gasket details

Two-Piece Gaskets forms a seal at the inside corners of the A.I. Healthcare walls.

Inside Corner Gasket

- Provides a gap seal for the inside of a 90 ° corner
- Base Gasket to Ceiling
- Two piece gasket, with the female portion inside the corner of two Fascias, and the male portion forms the seal to the fascias
- 1" of the tail must be trimmed during installation to clear ceiling extrusion
- Length: 10'
- Finish: Ebony, Platinum, Very White

inside corner / wall interface



reveal line gasket details

Gaps between Fascias are sealed using the Reveal Line Gaskets

Reveal Line Gasket

- Gaskets for vertical and horizontal reveal lines
- Mounts between two inline Fascias with a press-fit connection
- Trimmed on site around any Equipment or Accessories being mounted to the Vertical Post Package
- Length: 10'
- Finish: Ebony, Platinum, Very White

reveal line gasket / wall interface



Reveal Line Gasket (FHGR)



door introduction

Variety of Healthcare features are integrated into A.I. Healthcare door options, including ADA compliance door options.

- Door leaves, Jamb Kits, and Handles need to be specified to create a complete Door Module
- Fascias above and adjacent to Doors need to be specified separately



solid door leaf details

Solid Door permits a swing opening up to 180 ° (actual 176 °with door stop).

Solid Hinged Door Leaf Single



* dimension is affected based on door bottom increment

solid door with glass insert details

Glass Insert doors that complies to A.D.A. Requirements, with the same swing opening up to 180 ° (actual 176 °with door stop).

Solid Hinged Door with Glass Insert Leaf Single





Solid with Glass Insert - Justified Half





22-1/4"

(565mm)

Solid with glass Insert - Justified Full



- 1-3/4" thick Solid Door Leaf with 6mm Glass Insert, justified upper half glass
- Viewable Glass: 33-1/4" x 9-1/4"
- Available in 40" and 42" nominal widths
- Nine increments available to accommodate on site door variability
- Optional 10" high stainless steel kickplate (ADA)
- Optional auto bottom seal to minimize sound leakage



- 1-3/4" thick Solid Door Leaf with 6mm Glass Insert, justified full height glass
- Viewable Glass: 55-1/4" x 9-1/4"
- Available in 40" and 42" nominal widths
- Nine increments available to accommodate on site door variability
- Optional 10" high stainless steel kickplate (ADA)
- Optional auto bottom seal to minimize sound leakage



- 1-3/4" thick Solid Door Leaf with 6mm Glass Insert, centered half glass
- Viewable Glass: 33-1/4" x 22-1/4"
- Available in 40" and 42" nominal widths
- Nine increments available to accommodate on site door variability
- Optional 10" high stainless steel kickplate (ADA)
- Optional auto bottom seal to minimize sound leakage



* dimension is affected based on door bottom increment

jamb details

Jambs are independent frames that cover the vertical and horizontal structural elements in a door assembly.

Solid Hinged Door Jamb Kit Single (FHJA)

- Jamb for the Solid Hinged Door Leaf Single, and Solid Hinged Door with Glass Insert Leaf single
- Jamb Kit consists of Jamb frame, Connection Hardware (including Hinges), Adjustable Strike Plate, and one Door Stop
- Jamb kit are to be trimmed on site
- Available in 40" and 42" nominal widths



Dimension is affected based on door bottom increment.

door swing direction

Left or right handedness is determined by the opening slide/swing direction of travel. Locking or non-locking doors are available. Keyed Lock is always on the outside, and Thumb Turn on the inside.



door increment details

Door Increments is used to address floor variability on site.

- Refer to floor measurements as outlined in Site Planning Section
- Increments of Door is designed to tailor fit to the Door in the closed position, to minimize any gaps to reduce sound transfer
- Use the table below to match your Corrective Dimension to the appropriate Door Increment based on the formula as outlined in Site Planning Section
- Ensure any measured points in the door swing area is no more than 1/4" LESS than the identified Jamb Line Node used to order the appropriate Door Increment

Increment **Corrective Dimension** A В С D Ε F G Η 0" to + $\frac{1}{16}$ " $+\frac{1}{8}$ " to $+\frac{5}{16}$ " +³/₈" to +⁹/₁₆" $+\frac{5}{8}$ " to $+\frac{13}{16}$ " +7/8" to +1 1/16" +1 $\frac{1}{8}$ " to + 1 $\frac{5}{16}$ " +1 3⁄8" to +1 1/16 +1 $\frac{5}{8}$ " to +1 $\frac{13}{16}$ " +1 7⁄8" to +2"

Example 1:

Minimal node between strike and hinge node: 109-3/4" Specified System Height: 109" Increment measurement needed to fill: 3/4" Door Increment needed: D Minimum node in door swing area: 109-5/8" Floor Variability: 1/8"



Example 2:

Minimal node between strike and hinge node 105-3/8" Specified System Height: 104" Increment measurement needed to fill: 1-3/8" Door Increment needed: G Minimum node in door swing area: 105-1/8" Floor Variability: 1/4"



With Increment



Before Increment:

Door Gap: 1-7/8"

hardware details

The following outlines the handles available on the swing door program.



Control Key (FHKK)

• Used to remove or install an interchangeable core.

handle details

	Handles			
Series Name	ALX Series	L Series		
Product Code	Door Handle Schlage ALX Series	Door Handle Schlage L Series		
Lever Style	Athens Type A Type R	07 07 Type 07 06 Type 06		
Lock Type	Cylindrical Lock	Mortise Lock		
Lock Function	Push button lock - ADA Std Passage set	Easy turn - ADA Schlage L583- 363		
Keying	Conventional, key in lock (KIL) 6 pin Full Size Interchangeable Core (FSIC) cylinder 6 pin	Conventional, mortise 6 pin Kell Size Interchangeable Core (FSIC) cylinder 6 pin		
Lever Finish Options	Satin Chrome ANSI/BHMA626, US26D	Satin Chrome ANSI/BHMA626, US26D		

• Inside lever always free for immediate egress.

• After installation, customers may choose to relocate or replace interchangeable core cylinders to suit their security needs.

[•] Doors specified with "conventional cylinder" are keyed randomly (two keys provided per door).

[•] Doors specified with "Interchangeable Core Cylinder" are keyed randomly (two keys provided per door), but cylinders can be removed by a universal control key (Order key separately).

[•] Keying is Schlage Everest S123 Keyway. The everest "S123" key is backwards compatible to the Everest "C123" keyway lock cylinder. However, the "S123" key is not backwards compatible with the "C" keyway lock cylinder.

[•] Doors specified with "conventional cylinder" are keyed randomly (two keys provided per door).

[•] The keyway is open, meaning they are available to end users from locksmiths for key duplication without any official procedure.

planning with swing doors

The following rules should be considered when planning with A.I. Healthcare Swing Doors

- Doors can only be specified on Single Walls, a matching Fascia in Glass or Solid will be supplied
- All Swing Doors may be planned adjacent to any Fascia elevation: Monolithic or Segmented
- Vertical Post package Segmented should be used in all cases to accommodate the fascia above the door



Wall Starts and Filler Panels



electrical introduction

There are three methods of supplying power and communications in A.I. Healthcare, each method functions differently, and have different application based on the facility's needs.



comparing electrics & communication methods

There are three methods of supplying power and communications in A.I. Healthcare, each method functions differently. The following chart will help you select the appropriate solutions.

- Check local codes for potential limits or restrictions on products. Local authority approval may be required prior use.
- Healthcare Specific power requirement that are outside of standard offerings will be treated as Special.

		Teknion		
	Field-supplied Electrics	Hardwire Electrics	Power Data Electrics	
Daisy chaining			\checkmark	
Reconfigurations			\checkmark	
Back to back applications	Good	Good	Best	
Licensed electrician labor	All labor required	Most labor required	Minimum labor	
Installer labor			Minimum labor	
Mounting method	Fastens to back of fascia	Fastens to back of fascia with provided screws	Fastens to back of fascia with provided screws	
Compatibility with A.I. Healthcare	\checkmark	\checkmark	\checkmark	
Standard cut out height	18" height, worksurface height, backsplash height	18" height, worksurface height, backsplash height	18" height, worksurface height, backsplash height	
Cut out orientation	Vertical and Horizontal	Vertical and Horizontal	Vertical and Horizontal	
Control receptacles	\checkmark		\checkmark	
USB receptacles	\checkmark		\checkmark	
Wire systems	• Standard Circuit • Isolated Circuit	• Standard Circuit • Isolated Circuit	• 4B • 7G • 8K • 5D • 8T	
Compatible with Teknion Standard electrical wiring systems			\checkmark	
Type of circuit	All local options available	120 volt; 15 amp and 20 amp options	120 volt; 15 amp and 20 amp options	
Electrical components available	Uses industry standard receptacles commonly used in drywall applications. Contractor provides all electrical components - only the Fascias are specified with cut outs	ERMFH, ECMFH, ELSFH, EFCCFH	EPDMCFH, EPDMSFH, EPDMDFH, EPDMTFH, EPDMQFH, EPDDBFH, EPDICFH, EPDSCFH, EPDCHFH, EPDHCFH, EPDHSFH, EPDHDFH	

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comparing electrics & communication methods (continued)

The following chart helps visualize the differences between Teknion's two electrical systems for A.I. Healthcare.

Vertical cut outs (applicable for 18"height). ۲ Duplexes and data boxes are specified separately. Ω Data jacks/faceplates are not included on] [communications module. Ω Images are for illustration purposes only. \odot æ Hardwire Electrics Horizontal cut outs (applicable for worksurface and backsplash height). D. D ۲ ۲ ۲ D ۲ Vertical cut outs (applicable for 18" height). 0 0 Ω Ω Screwless Face plates.] [] [Self contained unit for an homogeneous, clean look. Ω Data and Power in one box. Single face plate for entire box. Power Data Electrics Data jacks/faceplates are not included on Power Data modules. Horizontal cut outs (applicable for worksurface height and backsplash Images are for illustration purposes only. height).

cut out heights & options

Electrics and Communications receptacles can be specified at three levels base height, 18" height and work surface height depending on type specified

- Wall Modules that require electrics or communications are specified by ordering Fascias that come complete with cut outs
- Fascia cut outs are required for accessing Power and Communications
- Cut out locations vary depending on the application type:
 - All cut outs are located right of center-line on the front of the Fascia on Single Wall Modules– this allows for electrics and communications to be specified on both inner and outer elevations of the same Wall Module
 - Double and Plumbing Module Fascias can specify cut outs back to back
 - At Worksurface and backsplash height, cut outs are always oriented horizontally


application guide

fascia power/communications cut out options

- The chart below outlines the styles of openings available for Fascias that accept electrical cut outs
- Each letter represents a different cut out style
- Cut out styles should be chosen depending on the electrical system being used



fascia power/communication cut out restrictions

- One size cut out fits both receptacle and Communications Modules
- Any combination of Receptacles or Communications Module are possible



hardwire electrics & communications details

- Connection to building supply must be done by a qualified electrician
- Fascia cut outs may not accept client-supplied standard electric/data boxes, receptacles and faceplates, the factory cut outs match factory electrics
- One size cut out fits both Receptacle and Communications Modules. Any combination of Receptacles or Communications Modules are possible



Electrical and communication cut outs installed in these locations





Modular Furniture Decora Strap Faceplate







Receptacle Module (ERMFH)

- Provides access to electrical power and can be installed at all Fascia cut outs
- Available in Standard or Isolated Ground
- Pre-wired with 20'–0" cable
- A.I. Healthcare receptacles are standard 120-volt with a choice of 15 or 20 amps
- Comes ready for installation and includes a standard electrical/data box, decora receptacle and faceplate



Communications Module (ECMFH)

- Voice and data are brought to the workspace via the Communications Module and can be used in all Fascia cut outs located at base height, 18" high and worksurface height
- Accepts modular furniture or decora strap faceplates
- Jacks/faceplates and cabling not included
- Can be specified to accept the pictured two faceplates
- Can be specified to accept twisted pair, fiber optic or coaxial cable (supplied by others)



Fascia Cover Cap (EFCCFH) • Covers any unused Fascia cut outs for Hardwired electrics

planning power with hardwire

- Electrical and communication cables can be routed into A.I. Healthcare walls through a Three-Way or Four-Way Transition
- It can also be routed by drilling a 7/8" hole through the Ceiling Extrusion and Ceiling Frame Beam for a ceiling drop
- It can also be routed from the floor by drilling the same size hole through the Base Extrusion



Two options are available for wire systems in ERM Receptacle Modules, hardwire electrics:

Standard Circuit





(for isolated ground: orange receptacle)

A.I. Healthcare Receptacle Modules consist of three wires (one circuit) for standard circuits and four wires for isolated ground circuits. Receptacles can be specified as standard or isolated ground.

power data electrics details

A.I. Healthcare Power Data Electrics allows for maximum flexibility and simple reconfiguration.



1 Power is provided to A.I. Healthcare walls by a building junction box provided by others

2 Power Data **Starter Cable** - Connects to the building's junction box (by a certified electrician). Cables are fed from the ceiling or from access floors though cut outs in the ceiling or base channels to the Power Data Modules

3 Four-Way Splitters - Connects to the Starter Cable and allows daisy chaining as well as back to back

4 Power Data Connecting Harness can be specified to link modules or passing through panels without receptacles

5 Modules can be mounted back to back to provide power to adjacent rooms

6 Reaching other power locations can be accomplished by adding an **In-line connector** to lengthen the infeed with a power harness when is end of run, single sided

Power can be accessed through the use of power modules, which are mounted on Fascias at 18" height, or 33"AFF. That is below or above the worksurface respectively (standard cut out locations). Power Data Modules are mounted from behind the fascia by fastening to the fascia.

power data electrics details (continued)

- · Power Data components can be connected in series (daisy chained) and are non-directional
- · Power from a single building supply may be routed to multiple offices
- Back-to-back installation of electrics and communications is possible because electrical box mounting if offset on the Fascia on Single Walls, Double Walls do not have this restriction
- All components must be specified from same wire system systems available: 4B, 5D, 7G, 8T and 8K
- Certain A.I. Healthcare Fascias are available with cut outs to match each Power Data Module type
- Power Data Components can not be connected with Hardwired Components
- · Electrical Connections to the building power supply must be done on-site by a certified electrician
- Maximum number of Power Data Modules chained by one feed is limited by electrical loads. This will depend on number of receptacles per Power Module, what will be plugged in to those receptacles, the number of circuits, and the local code's requirements. For convenience, limit to four rooms/offices. Please contact your electrical contractor for further assessment



power data components

Power Data consists of the following components.

Power Data modules mount to panel Fascias to provide access to Power and/or Communications. The following chart will help you select the appropriate solution.

	Visual	Power Duplexes	Data Openings*	Conduit Length	Color	Electrical Voltage and Current
Power Data Vertical Module – Communication (EPDMCFH)		0	1	No conduit	Black or White	
Power Data Vertical Module – Single (EPDMSFH)		1	0	18" Long	Black or White	120 volt and 15 amp or 20 amp
Power Data Vertical		1	1	18" Long	Black or White	120 volt and 15 amp or 20 amp
(EPDMDFH)		2	0	18" Long	Black or White	120 volt and 15 amp or 20 amp
Power Data Vertical Module – Triple (EPDMTFH)				18" Long	Black or White	120 volt and 15 amp or 20 amp
Power Data Vertical Module – Quad (EPDMQFH)		3	1	18" Long	Black or White	120 volt and 15 amp or 20 amp
Power Data Horizontal Module - Communication (EPDHCFH)	F	0	1	No Conduit	Black or White	
Power Data Horizontal Module - Single (EPDHSFH)		1 0		18" Long	Black or White	120 volt and 15 amp or 20 amp
Power Data Horizontal Module - Double (EPDHDFH)		1	1	18" Long	Black or White	120 volt and 15 amp or 20 amp
		2	0	18" Long	Black or White	120 volt and 15 amp or 20 amp

*All data openings include one cover plate for the communication outlet (color to match faceplate).

Connects to building communication network (no power).

Cables and data jacks for communication boxes to be provided by others.

power data components (continued)

Power Data Electrics consists of the following components to route power to A.I. Healthcare Fascias.

	Description	Visual	Length
Power Data Four-Way Splitter (EPDDBFH)	 Distributes power in two or three directions. Routes power between modules, harnesses, and/or starter cables. Includes two port covers. 	a for ca	No conduit
Power Data In-line Connector (EPDICFH)	• Routes power between modules, harnesses, and/or starter cables.	af a	No conduit
Power Data Starter Cable (EPDMCFH)	 Feeds building power from ceiling down to the Power Data Modules in a panel, or from base floor up to the modules. Always connects to a junction box (provided by electrician). Includes an In-line Connector. 		Available in 18", 120" and 240" lengths
Power Data Connecting Harness (EPDCHFH)	 Routes power between Power Data Modules and is non directional. Also connects to Starter Cables for routing power. 	Ris-South State	Available in 48", 72", 96", 120", and 144" lengths

application guide

power data outlets

Power Data Receptacles are available in 15 amp, 20 amp and with USB options. Please see chart for possible combinations.

- Control receptacles combined with Power Data circuits allows plug loads control for reducing energy consumption. Ref ANSI/ASHRAE/IES Standard 90.1, California Energy Commission (CEC) Title 24, part 6
- USB receptacles are only available in Circuit 1
- USB receptacles cannot be on a controlled circuit



*USB (A+C)

Cable compatibility:	USB C
· ·	USB 2.0
	USB 3.0

USB charger provides a total combined output of up to 25 Watts (5 Amps).

Maximum output on the USB-A port is 10 Watts (2 Amps). Output voltage is fixed at 5 Volts DC.

Faceplate opening dimensions for Data:



Data opening accepts modular furniture faceplates (supplied by others).

understanding controlled receptacles

A.I. Healthcare based solution for the controlling function that addresses the ASHRAE/Title 24 energy conservation requirements.

Power Data electrics offers standard and controlled power receptacles for A.I. Healthcare walls. Controlled receptacles are any receptacles connected to an automatic shut-off controller.

- Shut-off controllers turn electrical power on and off in those controlled receptacles to:
- Save electrical consumption,
- Reduce carbon footprint,
- Comply with energy codes and
- To earn points for LEED rewards/certifications
- When devices such as monitors, televisions or task lights, are left ON or plugged in when not in use, they still consume energy. Power controlled receptacles will automatically switch off to minimize wasted energy. Power can be switched off by means of an occupancy sensor, timer or other method as chosen by the site electrician or contractor. This allows for ASHRAE/Title 24 compliance
- Receptacles are typically controlled by circuit in a modular power distribution system. This means that all receptacles on the same circuit will be controlled together. For example, if circuit #2 is connected to a sensor placed in the ceiling, then all receptacles on circuit #2 powered from the same feed harness will switch on and off together. Even if they are in separate rooms. This is important to remember/understand when specifying or planning the electrical layout
- Controlled receptacles are simple to identify. They are marked with the universally recognized power symbol and the word "controlled". This permanent marking allows users to differentiate them from standard receptacles and inform employees, guest users and others which receptacles have constant power availability and which receptacles may have power switched off at predetermined times or occupancy conditions
- · Identifying which outlets automatically shut-off and which remain constantly powered is important, so the correct equipment and devices may be plugged into the appropriate outlet



Plug in:

- Printers
- Televisions
- Water fountains

determinating harness lengths

The following outlines the Harness Lengths required for connecting Power Data Modules.

- It is important to include in-line connectors and four-way splitters to connect Power Data Modules
- All Power Data Modules have 18" long conduits
- A.I. Healthcare Vertical Posts have 3.5" high openings at 12" and 25" AFF
- Plumbing Vertical Post have 3.5" high openings at 24-1/2" and 41-1/2" AFF
- Cut outs on the horizontals are located 3" from the vertical reveal line, to the center of the cut outs at each end. They are 1.2" by 3.1"

add the following applicable length then use the harness length matrix to order harness product/s:

- 1) 1/2 the wall segment width on the starting Power Data Module
- 2) 1/2 the wall segment width on the destination Power Data Module
- 3) One full wall segment width on any pass-through walls
- 4) 14" when passing through a connector post (two-way, three-way or four-way)
- 5) 30" for dropping and rising to pass through base (applies to 18" high AFF and worksurface height)
- 6) No length required to transition for a back to back application (applies only when connecting two modules)
- 7) When three or four power modules are in the same frame section (ie. at 18"AFF and 33"AFF, back-to-back), you need two additional splitters and a short harness

harness length matrix

Calculated Length	Harness Length combination				
0" to 47"	48				
48" to 71"	72				
72" to 95"	96				
96" to 119"	120				
120" to 143"	144				
144" to 167"	120, Inline Connector, 48				
168" to 191"	120, Inline Connector, 72				
192" to 215"	120, Inline Connector, 96				
216" to 239"	120, Inline Connector, 120				
240" to 263"	120, Inline Connector, 144				
264" to 287"	144, Inline Connector, 144				



Always remember to include in-line connectors and four-way splitters to connect Power Data Modules and/or harnesses.

application guide

determinating harness lengths (continued)

The following examples will further explain these rules, all examples shown below assumes wall width nominal of 36".



Passing through more than one module, when dropping and rising through the base.



When passing through unpowered fascias with obstructions such as glass panels, a change of height is necessary to route power at base.

application guide

determinating harness lengths (continued)

The following outlines the Harness Lengths required for connecting Power Data Modules. All Examples shown below assumes wall width nominal of 36".

Back-to-back Power Data Modules



Back-to-back Power Data Modules do not require harnesses to connect them together.

Passing through Corner Connections



Connecting a Power Data Module at 33" AFF with one at 18" AFF on the same Fascia



Connecting three or four Power Data Modules in the same Fascia



When connecting three or four power data modules in a single wall module, such as the case of back-to-back situation, a 48" harness and two additional splitters are required.

planning with power data power distribution

A.I. Healthcare framing system has cut outs that allow for routing cables. Cables can be fed through Ceiling or Base Channels, Horizontals, and Vertical Posts. The following should be considered when routing Power Data Electrics.

	Number of maximum connectors pe						
Power path	1	A.I. Healthcare Power Data					
In-line through two Vertical Post		3					
Through Horizontal		2					
Through Horizontal at the Base		2					
Two-Way 90°, through two Vertical Posts		3-3 as shown					
Three-Way 90°, through three Vertical Posts		3-3 as shown					
Three-Way 90°, through three Vertical Posts		3-2-1					

ut out

The Wall End, and Adjustable Wall Start do not route electrics or communications to adjacent walls

planning with power data power distribution (continued)

Number of maximum connectors							
Power Pa	ıth	A.I. Healthcare Power Data					
Three-Way 90°, through three Vertical Posts		3-2-3					
Three-Way 90°, through three Vertical Posts		2-3-3 as shown					
Three-Way 90°, through three Vertical Posts		2-2-2					
Four-Way, through Vertical Post. Must drop down to make a turn		1-1					
Routed vertically through Three- and Four-Way Corner Connection		1					

cut out

The Wall End, and Adjustable Wall Start do not route electrics or communications to adjacent walls

planning with power data power distribution (continued)

Power Data Electrics can be daisy chained above ceiling, inside walls, or below floor.

power distribution inside A.I. Healthcare walls



planning with power data power distribution (continued)

The following should be taken into consideration when planning for Power Distribution.

planning with glass fascias





Power Data Components can **not** be routed through Fascia packages that include Glass Fascias. They must be routed elsewhere.



Power Data Components can be routed through Base Channel at any point.

planning with light switches



planning with power data power distribution (continued)

The following should be taken into consideration when planning for power distribution

planning with glass fascias



Harnesses cannot be linked together. An in-line Connector or a Four-Way Splitter should be specified to connect them.

power data modules



power data information for electricians

Connection to a grounded three phase WYE system - 120/208 V.

- Five wiring systems are available for power data, 4B, 5D, 7G, 8T and 8K.
- It is important to specify each power product accordingly with the wire system in use. Components are marked with the wire system to avoid connecting mismatched parts.
- For sites where Isolated Ground is not available, Teknion offers Non-Isolated Ground options for powering walls. The site electrician or electrical contractor/consultant can identify sites where Isolated Ground is not available. For those sites, please specify Teknion 4B or 5D wiring systems.





5D 5-wire 3 circuit



power data information for electricians (continued)



7G 7 Wire 3 circuit (2+1 Isolated Ground)

8T 8 Wire 4 circuit (3+1 Isolated Ground)



8K 8 Wire 4 circuit (2+2) - Dual isolated



power data information for electricians (continued)

4B 4-wire 2 circuit



5D 5-wire 3 circuit



7G 7 Wire 3 circuit (2+1 Isolated Ground)



power data information for electricians (continued)



8T 8 Wire 4 circuit (3+1 Isolated Ground)

8K 8 Wire 4 circuit (2+2) - Dual isolated



light switch details

A Light Switch is available in A.I. Healthcare that allows user control of ambient lighting.

- Light switches are always hardwired and independent of which electrical system is chosen
- Light switches are field installed on Solid Fascias and are cut on-site
- Light switches are supplied with 20'-0" cable and must be connected to building supply by a qualified electrician
- Black or White options available



Light Switch (ELSFH)

• Allows for user control of individual room ambient light.

• Can be installed on solid Fascias.

• Is recommended to locate the cut out 42" above finished floor to the center-line of the light switch.



Typical Light Switch location. Cut out on site.

add-ons introduction

Various accessories are available to maximize the use of the A.I. Healthcare walls

Equipment Rail

• Convenient equipment rail for mounting medical devices or storage solutions







Cabinet Support

• Robust cabinet mounting solutions that blends seamlessly to Teknion's Expansion Casegoods



application guide

equipment rail overview

Equipment Rails are used together with the Adapters to mount lighter weight equipment or storage solutions on the A.I. Healthcare walls without damaging the Fascias. It is designed for ease of replacement or upgrades.



53" shown, mounted on 48" Fascia width

Universal Mounting Adapter Mounted to generic basket shown



A.I. Healthcare Equipment Rail (FHRE)

- Attaches to the front of the fascias, from the vertical posts to hold the medical , infection control elements, PPE, sharps etc
- Can be mounted at all heights, with 1" increments
- Rail thickness is 1"
- Rail projection from fascia is 1-1/2"
- Length: 12" 72"
- Able to hold Mounting Adapters
- Weight Restriction: 40 lbs distributed across
- Includes: Brackets to connect rail to vertical posts, anti dis-lodgment bracket
- Finish: Standardized paint finishes



- A.I. Healthcare Universal Mounting Adapter (FHRA)
- Designed to hold a variety of medical equipment, to be field installed
- Hook and tightened onto the Equipment Rail
- Set screws secure the adapter in place and allows for easy relocation or removal
- Adapters are easy to relocate and secure using set screw
- Length: 3" and 5"
- Finish: Standardized paint finishes

equipment rail details

The following should be considered when planning with the Equipment Rails.

Rail can match fascia width, or span multiple fascias. A.I. Healthcare Equipment Rail can accommodate various site conditions and the mounting needs on site.

- Recommended overhang of the rail past the bracket is 2"
- Maximum possible overhang of the rail past the bracket is 5"
- Unless absolutely necessary, left hand overhang and right hand overhang should be equal





Rail centered on Fascia, Single span

• Includes two brackets to connect Rail to the Vertical Post



• One Rail mounted across two Fascias

Vertical Posts

• Includes three brackets to connect Rail to the



Next to Inside Corner

- Rail fitted next to an inside corner
- Not recommended



Rail Off-Centered on Fascias, Single Span

- Includes two brackets to connect Rail to the Vertical Post
- If Equipment Rail is to be installed next to a Wall Cabinet, Equipment Rail must be installed first



Stacked

- Rails above one on top of another
- Spacing between Equipment Rails must be considered based on the Equipment or Baskets being mounted, ensure proper clearance for accessibility



Next to Wall Start • Rail fitted next to Wall Start

Not recommended

equipment rail details (continued)



Typical Equipment Rail installation next to Expansion Casework Cabinets

- Equipment Rails are designed to be mounted on module. Design your Expansion Casework cabinets to work around the Equipment Rail installation limitations. Ensure Expansion Casework Cabinets do not overlap the intended location of the equipment rail
- Plan your Equipment Rail with power requirements intended for the Rail and ensure power is available within a safe distance



Equipment rail can be mounted next to Expansion Casework Cabinets. Note the following restrictions

- To install equipment rail next to Expansion Casework cabinet, ensure cabinet locations during planning do not cover intended vertical reveals for the Equipment Rail
- Equipment Rail must be installed prior to installation of Cabinets, in order to install the antidislodgement brackets
- Ensure installation location do not interfere with on site condition
- Ensure installation location accommodates sufficient clearance to other on site conditions
- Bracket may be visible on the inside corner

equipment adapter details



The universal mounting adapters can hold light weight medical devices and is adjustable to suit specific needs.

Medical Equipment that may fall outside of the envelope of the Universal Mounting Adapter will be managed as Specials.

Note:

Heavier equipment with dynamic load such as paper towel dispensers or soap dispensers cannot be mounted onto the Equipment Rail. These equipment will need to be installed directly onto the Fascia. Ensure Fascia Lock (FHCKL) are installed to ensure sufficient support and long term reliability.

worksurface supports overview

Proper support is essential when planning with A.I. Healthcare modular walls and work surfaces



cabinet support details

Proper support is essential when planning with A.I. Healthcare and its relationship to Expansion Casework cabinetry.

- Cabinets can only be installed on solid fascias and must be appropriately supported by the Expansion Casework Wall support, and the A.I. Healthcare Cabinet Support Brackets
- Both single and double configurations of the Cabinet Support Brace supports back-to-back installation
- Do not mount cabinets to any of the Horizontal Rails supplied in the Horizontal Rail Package
- Door Swing area must be considered when planning cabinets adjacent to doorways. Avoid placing cabinets adjacent to the hinge side of door modules

Cabinet Support Bracket (FHCRT)

Single Wall

- Provides the Horizontal structure to mount the Expansion Casegoods Wall Support through fascias, for hanging cabinets
- Supports back-to-back cabinet mounting
- 15" high wall cabinets require one cabinet support bracket, all other wall cabinets require two
- If cabinets are being mounted on a wall with Glass Segment 2, the tops of the cabinet cannot exceed 84" AFF
- No cabinet height restrictions using Solid Fascias



Cabinet Support Bracket (FHCRT)

Double and Plumbing Wall

- Provides the Horizontal structure to mount the Expansion Casegoods Wall Support, which is used to hang cabinets
- Cabinet brackets are separate, and has space for vertical pipes
- Supports back-to-back cabinet mounting
- 15" high Wall Cabinets require one Cabinet Support Bracket, all other wall cabinets require two
- No cabinet height restrictions on Double and Plumbing Walls

Cabinet Support Bracket - Single

Expansion Casegoods Wall Support

Expansion Casegoods Wall Cabinet



permissible cabinet configurations

The following information relates to cabinet installation in seismic zones for planning purposes



CABINET POST SPACING REQUIREMENTS AND LOAD LIMITATIONS

		<u>VERTICAL POST -</u> <u>SINGLE</u>		<u>VERTICAL POST -</u> <u>DOUBLE</u>			<u>VERTICAL POST -</u> <u>PLUMBING</u>				
	CABINET TYPE		MAX POST SPACING (INCHES)	PMAX TOTAL WEIGHT (Per Linear Ft)	STIFFENER REQUIRED	MAX POST SPACING (INCHES)	PMAX TOTAL WEIGHT (Per Linear Ft)	STIFFENER REQUIRED	MAX POST SPACING (INCHES)	PMAX TOTAL WEIGHT (Per Linear Ft)	STIFFENER REQUIRED
		ONE-SIDED	48"	160/lin. FT	NO	48"	160/lin. FT	NO	32"	100/lin. FT	NO
VERVIOW	HUNG	TWO-SIDED	40"	160/lin. FT		48"	160/lin. FT		32"	100/lin. FT	
SEISMICITY	FLOOR	ONE-SIDED	48"	Unrestricted		48"	Unrestricted		48"	Unrestricted	
	MOUNTED	TWO-SIDED	48"	Unrestricted		48"	Unrestricted		48"	Unrestricted	
LOW SEISMICITY	HUNG	ONE-SIDED	48"	100/lin. FT	YES	48"	100/lin. FT	YES	48"	70/lin. FT	YES
		TWO-SIDED	38"	130/lin. FT		48"	100/lin. FT		40"	70/lin. FT	
	FLOOR MOUNTED	ONE-SIDED	48"	250/lin. FT		48"	250/lin. FT		48"	250/lin. FT	
		TWO-SIDED	28"	500/lin. FT		48"	250/lin. FT		38"	250/lin. FT	
	HUNG	ONE-SIDED	48"	75/lin. FT	YES	48"	75/lin. FT	YES	40"	70/lin. FT	YES
MODERATE		TWO-SIDED	30"	140/lin. FT		48"	75/lin. FT		34"	70/lin. FT	
SEISMICITY	FLOOR MOUNTED	ONE-SIDED	36"	250/lin. FT		36"	250/lin. FT		36"	250/lin. FT	
		TWO-SIDED	24"	400/lin. FT		36"	250/lin. FT		28"	250/lin. FT	
HIGH SEISMICITY	HUNG	ONE-SIDED	40"	65/lin. FT	YES	40"	65/lin. FT	YES	36"	65/lin. FT	YES
		TWO-SIDED	24"	135/lin. FT		40"	65/lin. FT		26"	65/lin. FT	
	FLOOR	ONE-SIDED	28"	250/lin. FT		28"	250/lin. FT		26"	250/lin. FT	
	MOUNTED	TWO-SIDED	24"	270/lin. FT		28"	250/lin. FT		20"	250/lin. FT	

PMAX is the maximum permissible cabinet load in pounds per linear foot of wall, including the cabinet shelf weight and content loads. It is critical the total cabinet loads do not exceed the values in the above chart for the given maximum post spacing, and cabinet layout installed.

Where stiffeners are required as per table above, refer to post tube stiffener - cabinet application section for detailed information regarding the on-site installed stiffener.

For information regarding seismicity zone definition, refer to the A.I. Healthcare Standard Drawing Package.

Structural Engineer must verify site conditions and full-height wall applications as per local codes.

post tube stiffener - cabinet application

Post Tube Stiffeners are installed on site on verticals when cabinets are installed in seismic zones, refer to A.I. Healthcare standard drawing package for more information.



planning for frame anchoring

The following information serves as the framework for anchoring in seismic zones, detailed information available in the A.I. Healthcare Standard Drawing package.

Determine existing building conditions and verify the applicability and suitability, furthermore, retain a registered professional engineer to ensure suitability in accordance to local codes that pertain to the installation location.

Anchorage and bracing will change dependent on building material, there are different installation methodology and hardware requirements.

It is the end users' responsibility to consult with a local registered professional engineer to assess the impact of the A.I. Healthcare loads on the building structure and to establish compliance with the applicable building code. Refer to the A.I. Healthcare Standard drawing Package for anchorage information.

Design is based on a non-essential system defined by IBC 2021(IE 1.0), CBC 2022 (IE 1.0) and NBC 2022 (IE 1.0).

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