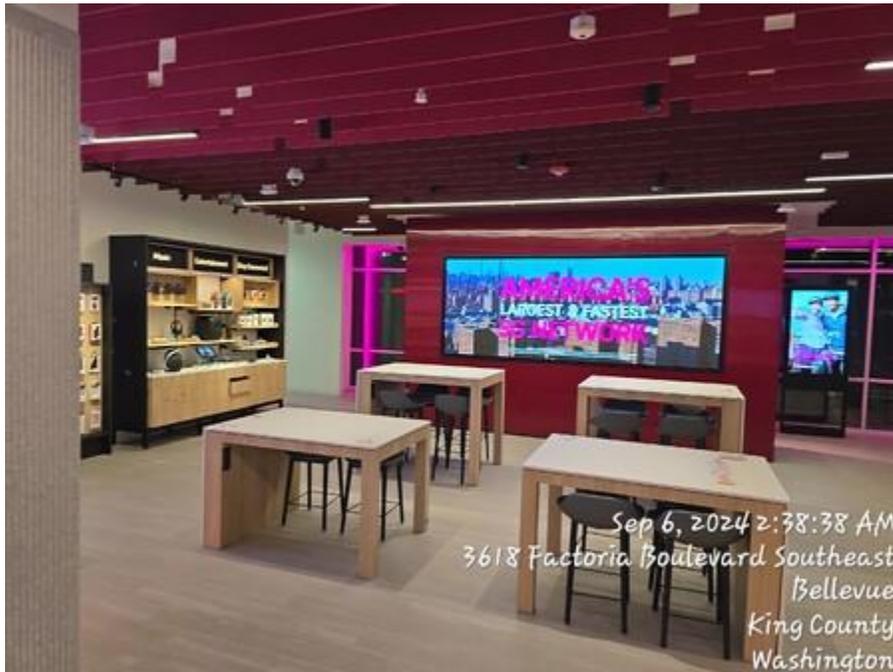


# 2025 Remodels Experience Design Concept RT Install Guide

A.Bazara, 11/19/2024



Sep 6, 2024 2:38:38 AM  
3618 Factoria Boulevard Southeast  
Bellevue  
King County  
Washington

# Supplies Needed

- Ladder
- Laptop with:
  - Ethernet port
  - TeamViewer is helpful if the NOC needs to do any configuration remotely.
  - Cisco Console cable (powder blue cable with DB9 Female and RJ45 Male connections)
  - Terminal Emulation software (putty, hyper terminal, etc.)
- Qty 4 – minimum size #10 x 1” pan head or round head wood screws (for hanging switch rack)-
- Label Maker (P-Touch or similar)
- 1 ream of printing paper to split between the new printers
- Digital Level (minimum of 2 feet required) (4 ft Empire Recommended)
- Scissor Lift (if required)

## Decom

LV technician is expected to be onsite for day 1 of construction to decommission existing RT equipment. Vendor is responsible for confirming exact start time with GC prior.

Once on site, technician will call T-Mobile NRD to check-in and have network equipment nested to prevent false alarms during construction. After technician gets NRD approval, they may begin decom. Please decommission in accordance with the attached playbook titled “RT Decom Playbook -Experience Remodels.”

Please record the inventory onsite and send to RT PM. If there are problems or missing components of any of the inventory, notify your PM immediately.

## Network Rack & Equipment

Most remodel projects will be getting a new network cabinet with equipment delivery during **week 6**. Please confirm with RT PM the status of the rack. If TMO will not be reusing the rack, the old rack can be thrown away.

Internet circuit data cables should be very clearly labeled “INTERNET: DO NOT CUT/NO CORTAR to avoid being damaged while not onsite. The internet circuit modems should be removed and stored safely. **These items will also be reused so preservation is essential.**

## Power Distribution at Rack

Power distribution will be a critical component of the overall project. We will be installing more equipment than we ever have before at the rack so it will be important to evenly distribute the power according to the attached diagram titled “Power Distribution at Rack.”

# Remaining RT Equipment & Cabling

All equipment labeled “Keep” or “Hold for RT” will be stored in the conex, or other storage area designated by the GC if a conex is not available.

Existing data cabling is to be removed and disposed of to prepare for new cabling to be ran later in the project.

## Rough-in

Cat 6 Cable count: 60

Cat6A Shielded Cable Count: 18

JCI Cabling: 30



LV vendor is to coordinate rough-in timeline with construction GC but should be completed prior to the ceiling grid being installed on **Wednesday of week 3**. Field terminations must be completed prior to fixture delivery (**Monday of week 6**) to avoid access issues. All cabling is to be ran with **5'** service loops on both ends. RAN cabling to have 15ft service loops on both ends

LED displays (back wall, bento headers, welcome cloud) require shielded cable to prevent interference. Shielded cables will be terminated into a shielded patch panel at the network rack, tipped with a shielded keystone jack in the field, and pulled through the fixture (no faceplate) to be accessed by the LED install team later.

# JCI Cabling

Black cabling required. Approximately 27-30 cable runs. Cable specs: **22/4c, STR, Unshielded, CMP/FPLP, Plenum**

Please follow placement of runs according to JCI drawings in T-Builder.

## RF/5G Cabling

Black Cat 6A Shielded. Total cables needed: 6. Includes: 4 shielded cat6A in FOH as well as 2 shielded cat6A in BOH.

### LED Cabling

Black Cat6A Shielded/

## Cable Standard

New LV cable is to be black Cat6 plenum. JCI cabling should also be black. Cabling should be supported in j-hooks installed on structural steel, wall studs, or ceiling wire (when allowed by local code). Terminations will utilize TSB-568B standard. All cabling is required to be tested and those results submitted with other deliverables.

## Cable Count

Cable counts can be determined by reviewing page A141 and page E101 of the construction drawings, but general expectation is below.

**Cable Count**

Fixture	Design Drawing Tag	Quantity per Store	Shielded	Unshielded	Equipment Requiring Data	Notes
OEM 1 Bento	XW173 or XW174	1	2	2	Media player, LEDs	
OEM 2 Bento	XW175 or XW176	1	2	2	Media player, LEDs	
OEM 3 Bento	XW177	1	2	4	NCD, VOIP Phone, LEDs	
T-Mobile Services Bento	XW178	1	0	8	HSI Tablet, Media player, NCD, VOIP Phone	
Other Product Bento	XW179	1	0	4	NCD, VOIP Phone	
Bopis/Grab and Go	XW302/XW303	1	0	2	NCD	
Digital Portal Wall (75" monitor)	XW471	1-2	0	2	Media player	
Digital Wall (Backwall LEDs)	XW472	1	4	0	LEDs	
Welcome Cloud	XF305 or XF306	1	2	0	LEDs	
Welcome Desk (?)	XF445 or XF446	1-2	0	3	(TBD)	ELO Tablets, if reinstated
Demo Cabinet	XF422/XF423	1	0	2	(TBD)	ELO tablet, if reinstated
Ops Cabinet (FOH printers)	XF424/XF425	1	0	3	B&W printer, Brother label printer	
Digital Front Window	XF309	2	0	3	Two Media Players	
OEM Table	XF211	2	0	2	N/A (Future development)	
REMO Health Charger	N/A	1	0	2	Mac Mini	In inventory room
Manager's Desk	FG103	1	0	4	Manager's PC, VOIP Phone	
Training Cart	FG205	1	0	2	Training PC	
BOH TV	ET410	1	0	2	Scala Media Player	
BOH Printer	ET102	1	0	2	Xerox C505	
AP	N/A	5	0	5	Mist APs	4 FOH, 1 BOH
Workshop Table(s)	XF403, XF404, XF405, or XF406	3-4	0	4	Care PC, VOIP Phone, Device Wizard	
Thermostat	N/A	1	0	1	Thermostat	Review page M101 and E101 to determine location
ShopperTrak	N/A	1	0	1	ShopperTrak	Above primary entrance
		<b>TOTAL</b>	12	73-82		

# Equipment Delivery

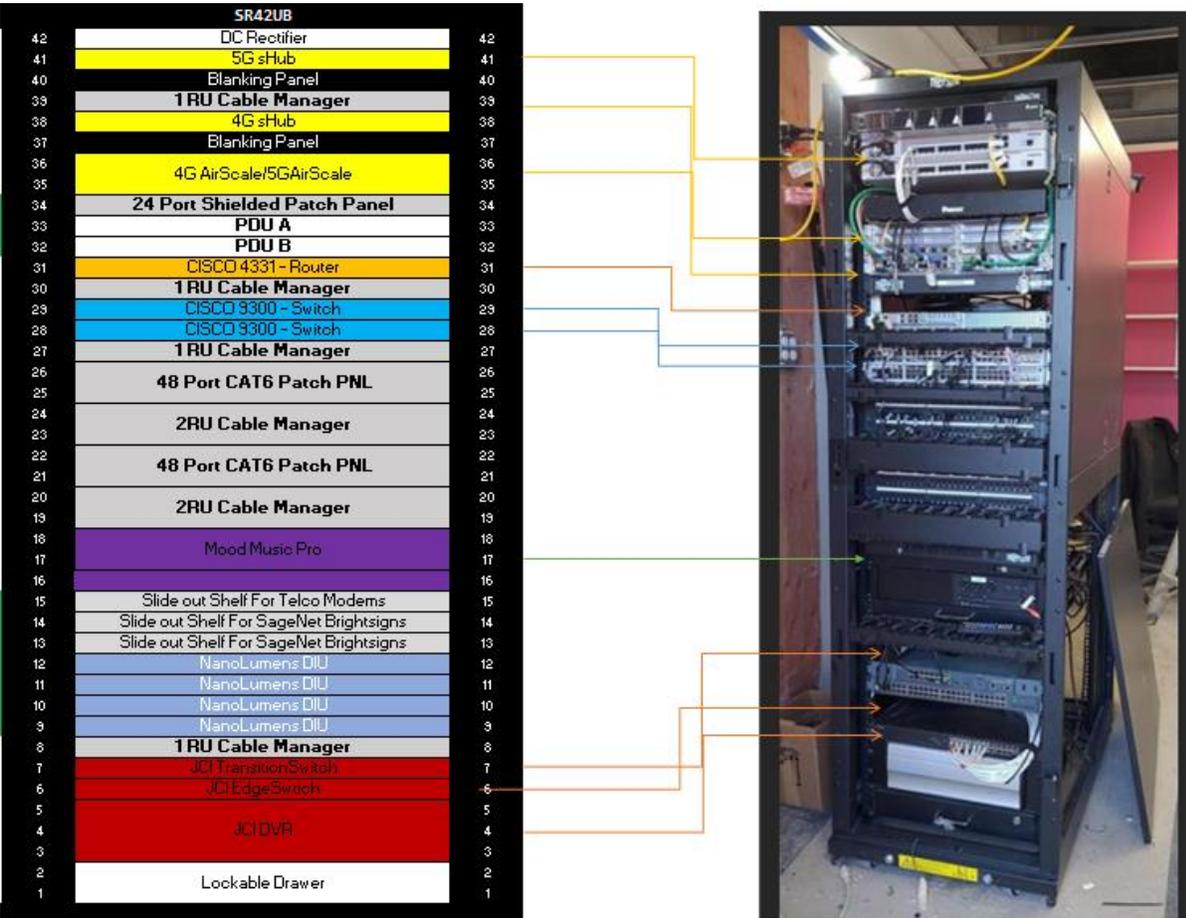
## Inventory

Inventory sheet attached in Supporting docs.

. LV technician is expected to be onsite to receive the delivery and complete inventory of new equipment. Any missing or damaged items are to be reported to the RTPM immediately. Technician is to complete the attached inventory sheet and upload to T-Builder ASAP.

## Network Rack Setup

Vast majority of sites will be receiving a new network equipment rack. Please install but do not bolt to floor (unless required to by the local city/jurisdiction. Do not bolt to the backboard either. Ensure rack is built to match the elevation guide below.



## Juniper Install Guide

Use the attached Juniper Install Guide to install the network equipment. **\*Do not start stacking network equipment without NRD approval first.\***

### External CradlePoint Install

In some cases, you will be required to install an external CradlePoint on the exterior wall of the T-Mobile store. With PM approval and specific instructions and landlord approval, install the external W1855 Cradlepoint in location that RT PM specifies. . The technician can also use this time to complete the patch panel while the fixture team is building the FOH furniture.

**\*\*INSERT W1855 GUIDE\*\***

## Post – Fixture Install Readiness Check

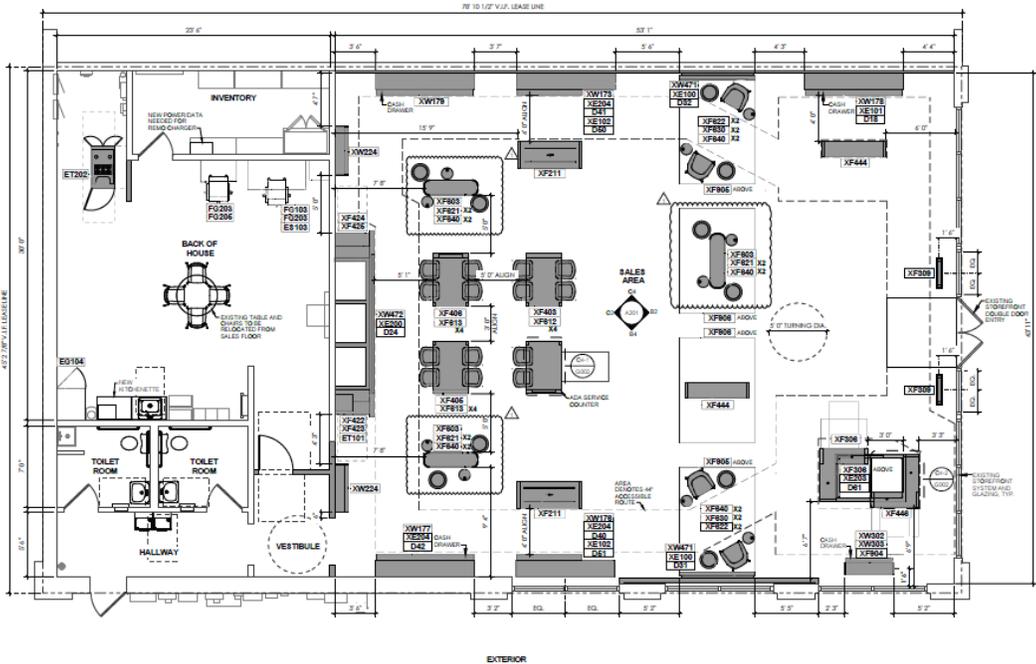
Arrive to site and use digital level to ensure LEDs are ready to install. Please see attachment titled “LED Fixture Tolerance Diagram.”

# End Device Installation

Experience Design Concept (E1) Layout



Example Store Diagram



# Front of House

## Floor Fixtures

### XF309 – DFW Freestanding, Double-sided Monitor

RT Equipment: 55" Samsung Monitor, Dual-Sided (OM55N-DS), two Media Players (EDFW-P\_1 & BDFW-P\_1 or EDFW-S\_1 & BDFW-S\_1)



- The DFW will be the first end device you will install
- Locate the RT equipment for this fixture
  - Each DFW gets two media players, one **E**DFW- and one **B**DFW-
    - E – external side display, B – building side display
    - Keep the P\_1 players together and the S\_1 players together

Please install according to attached “DFW Dual Sided Monitor Install Guide,”

- It will take 3 people to install the TV into this fixture.
- Work with fixture vendor (before it is installed!) to install this fixture together. Here are the steps:
  - Lay the fixture on it's side on the ground.
  - Slide the dual-sided monitor into to the fixture
  - Erect the fixture, and bolt to the floor.

Picture 1.



Picture 2

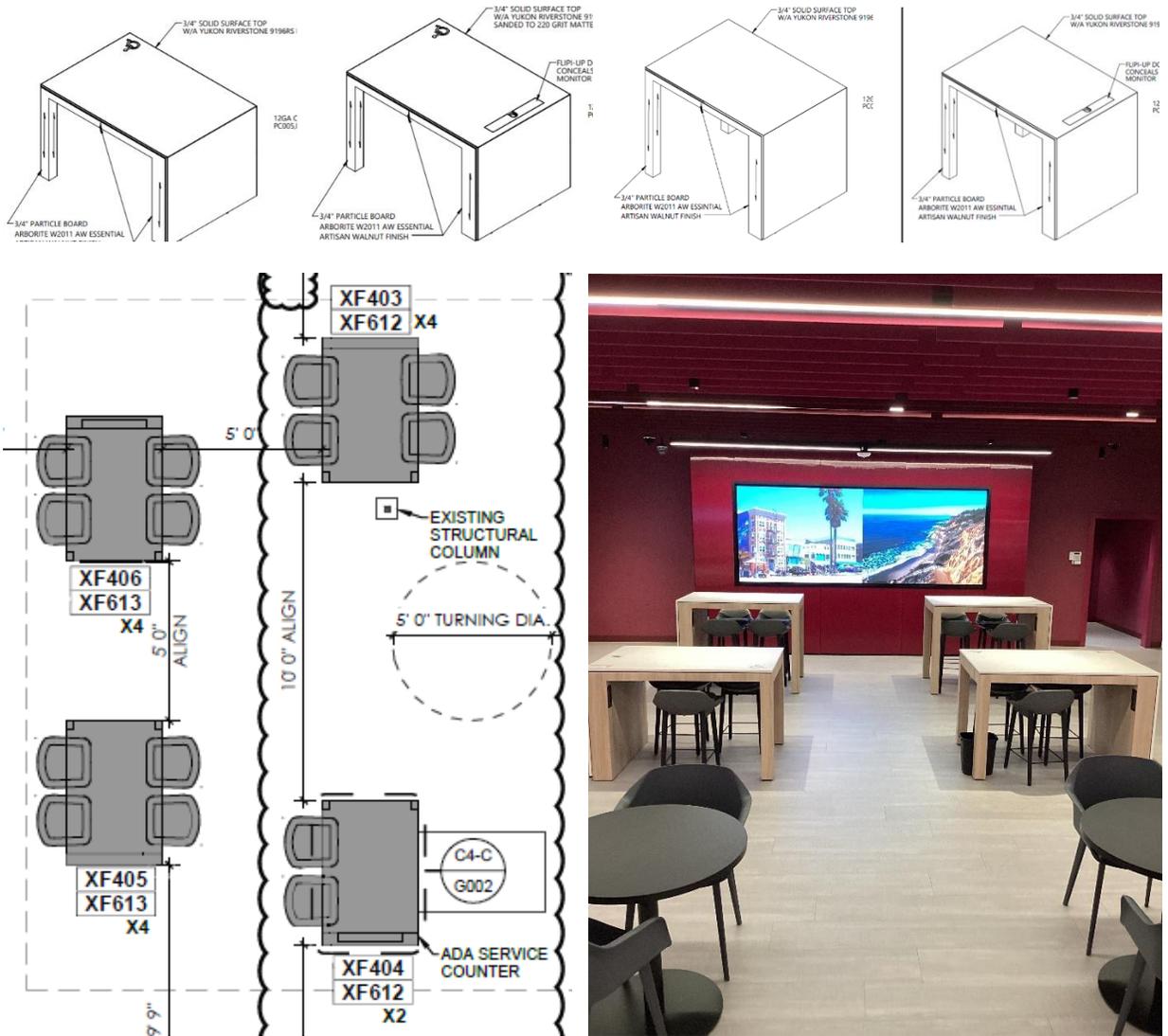


- Install the media players and patch them into the correct ports
  - EDFW-P\_1: switch 2 port 23
  - BDFW-P\_1: switch 2 port 25
  - EDFW-S\_1: switch 2 port 24
  - BDFW-S\_1: switch 2 port 26
- Connect HDMI cables from the media players to the appropriate side of the monitor
- Connect the ambient light sensor and IR sensors to the monitor; secure the sensors in the designated spaces of the upper trim piece
- Ensure ECO settings are off on monitor
-



XF403/XF404/XF405/XF406 – Workshop Tables- Now we only have 2 data per table. Look at the updated equipment counts

*RT equipment: Care PC bundle (XF404 & XF406), Cisco VOIP Phone (XF406), device wizard (XF403 or XF405)*

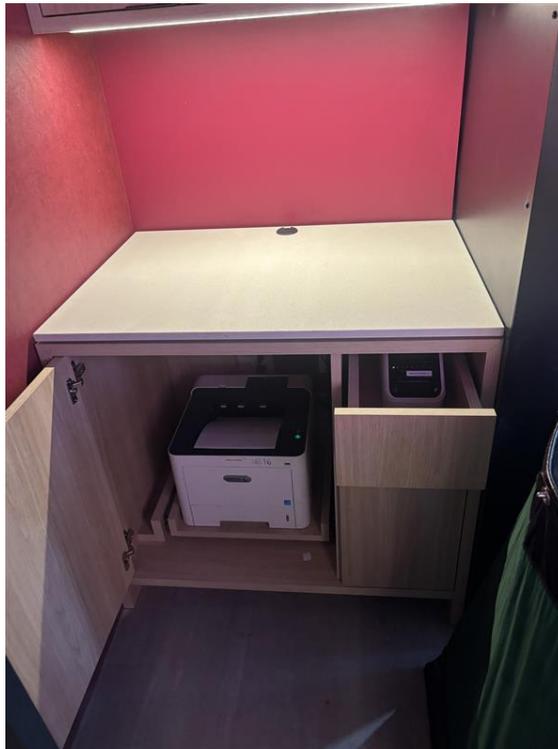


- Install device wizard and ensure cables are properly managed to prevent interfering with the drawer mechanism
- Patch device wizard into switch 2, port 16
- See Care PC guide for installation & cable management direction
- Place Cisco VOIP phone in XF406 drawer with Care PC mouse/keyboard and patch into one of the VOIP phone ports
  - Switch 1 port 41-48

Please see attached “Care PC Install Guide”

XF424 – Ops Cabinet Base- This will only apply if the fixture is there.  
They may have to install at the Services Bento

*RT Equipment: B&W printer, Brother label printer*

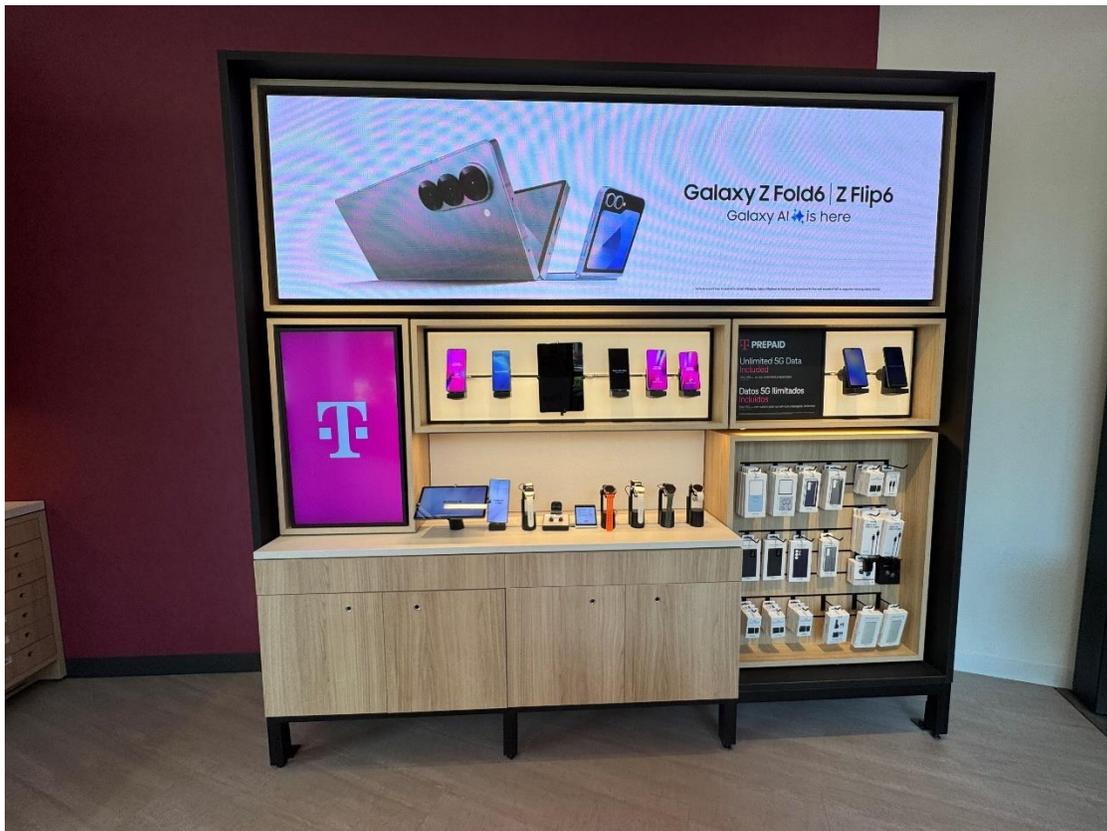
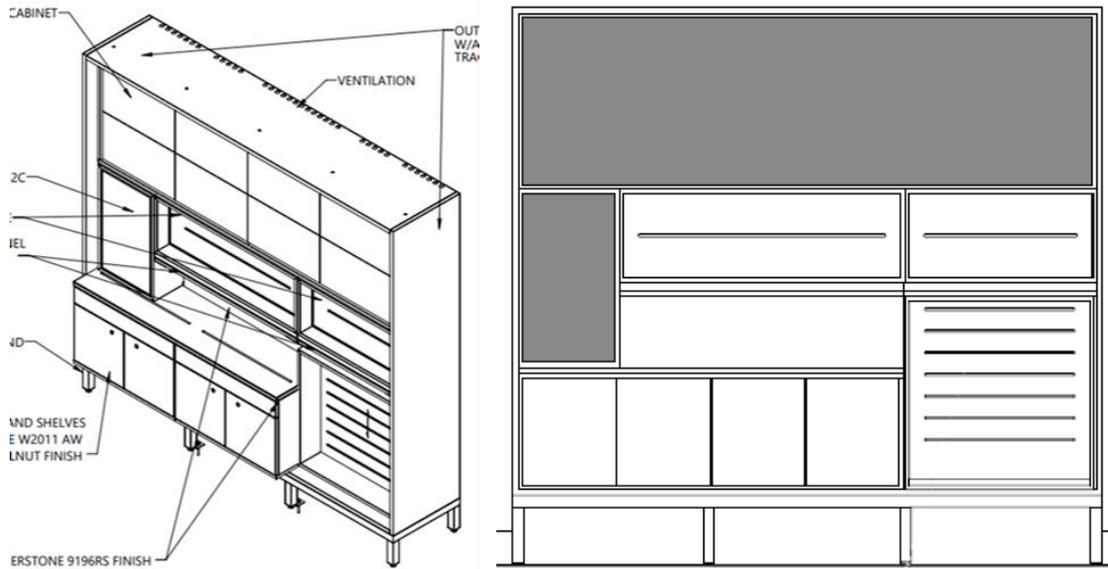


- Patch the black and white printer into switch 1, port 26
- Patch the label printer into switch 1, port 29

# Wall Fixtures

## XW173/XW175 – OEM 1/2 Bento Box Left

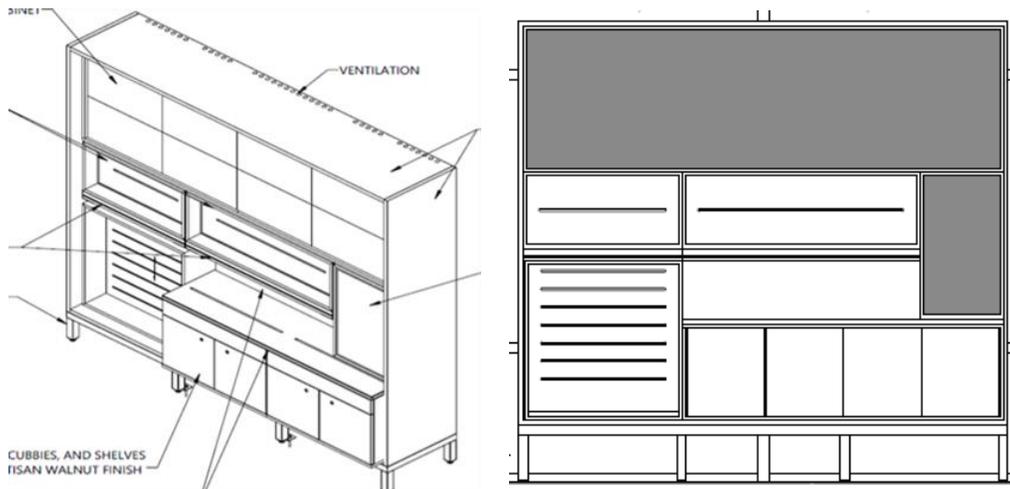
RT Equipment: 32" Samsung Monitor (QM32C), one Media Player (VPS-P\_1 or VPS-S\_1), LEDs



- Locate the RT equipment for this fixture
  - XW173: media player VPS-P\_1, XW175: media player VPS-S\_1
- Unbox the media player, plug it into power, and patch it into the correct port
  - XW173: switch 1 port 38, XW175: switch 1 port 39
- Plug the HDMI cable into the 'HDMI out' port on the media player
- Install the monitor mount provided by the fixture team
- Attach the 32" monitor to the mount using provided hardware
- Plug the monitor into power and connect the HDMI cable from the media player
- Ensure ECO settings are off on monitor
- Ensure the shielded cables for the LEDs are pulled through the access panel on the left side of the header

## XW174/XW176 – OEM 1/2 Bento Box Right

*RT Equipment: 32" Samsung Monitor (QM32C), one Media Player (VPS-P\_1 **or** VPS-S\_1), LEDs*

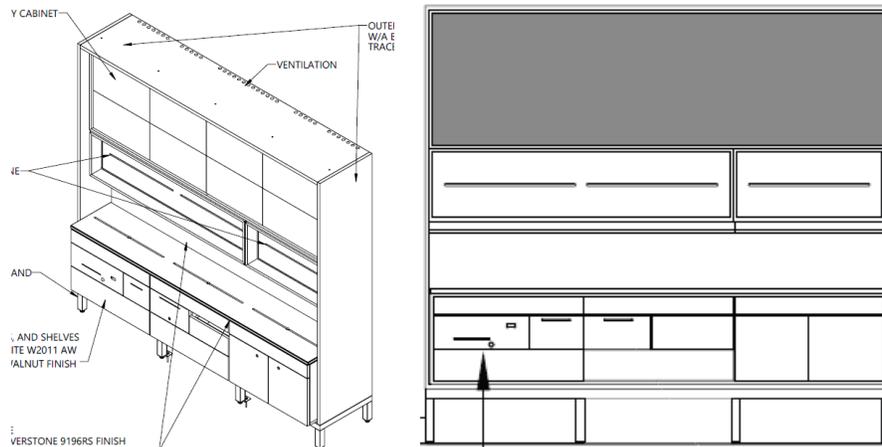


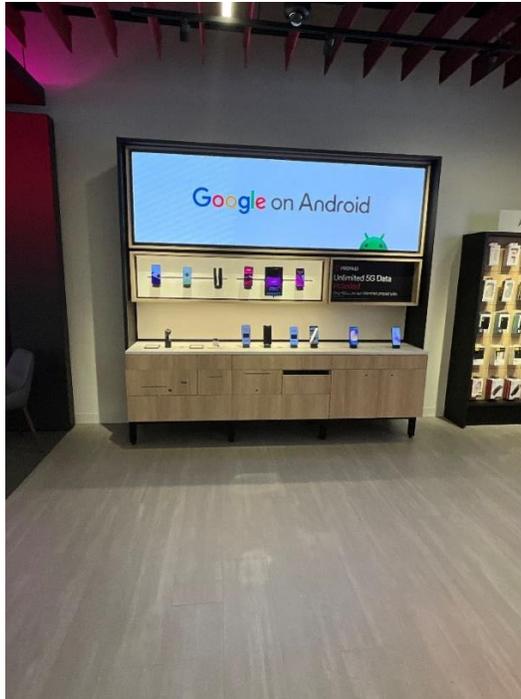


- Locate the RT equipment for this fixture
  - XW174: media player VPS-P\_1, XW176: media player VPS-S\_1
- Unbox the media player, plug it into power, and patch it into the correct port
  - XW174: switch 1 port 38, XW176: switch 1 port 39
- Plug the HDMI cable into the 'HDMI out' port on the media player
- Install the monitor mount provided by the fixture team
- Attach the 32" monitor to the mount using provided hardware
- Plug the monitor into power and connect the HDMI cable from the media player
- Ensure ECO settings are off on monitor
- Ensure the shielded cables for the LEDs are pulled through the access panel on the left side of the header

## XW177 – OEM 3 Bento Box

*RT Equipment: LEDs, Network Cash Drawer, Cisco VOIP phone*





- Locate the RT equipment for this fixture
- Place the cash drawer in the opening on the left side of the bento
- Patch it into one of the NCD ports
  - Switch 1 port 1 or 2, switch 2 port 1-3
- Plug the cash drawer into power
  - **\*\*IMPORTANT\*\*** the cash drawer will function without a dedicated power supply but it will sound an alarm indefinitely when opened. Do not assume functionality means correct installation
- Anchor the drawer in place by screwing the provided thumb screws into the bottom of the cash drawer through the pre-drilled holes in the fixture
  - If the thumb screws are missing, they can be procured locally. Size is #10-32 x 1 ½”
  - Do not overtighten or screws will push against the sliding drawer insert and inhibit function
  - Use no less than 2 anchor screws (4 preferred) to prevent the cash drawer from sliding within the fixture
- Attach the cash drawer faceplate provided by the fixture team
- Place the Cisco phone in the non-locking drawer to the right of the cash drawer (and secure to stand)
- Patch it into one of the VOIP phone ports
  - Switch 1 port 41-48
- Ensure the shielded cables for the LEDs are pulled through the access panel on the left side of the header

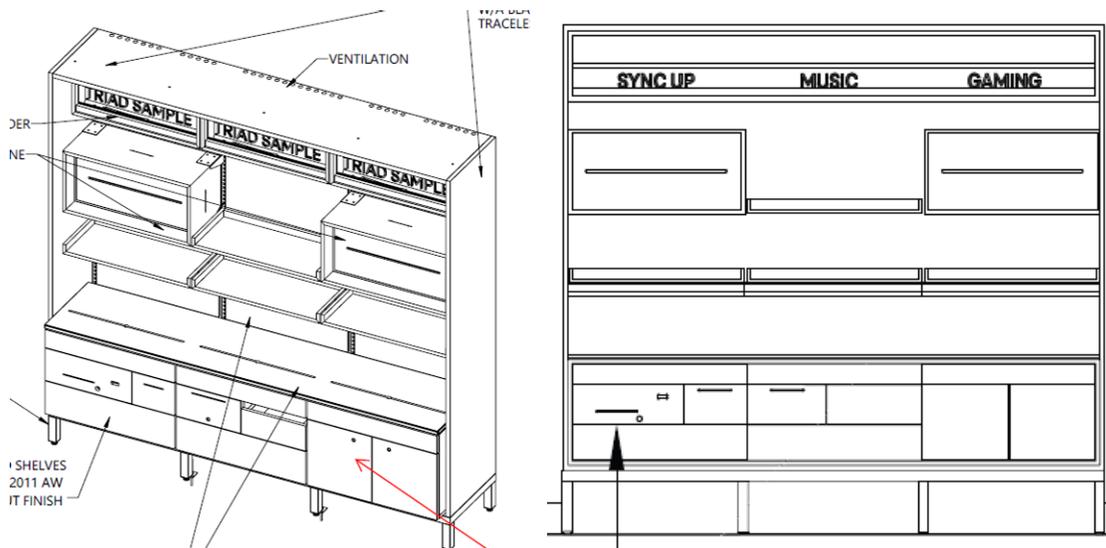
XW178 – T-Mobile Services Bento Box



- Attach the 55" monitor to the mount using provided hardware
- Plug the monitor into power and connect the HDMI cable from the media player
- Ensure ECO settings are off on monitor
- Locate the shroud for the HSI tablet and install it through the slot with brush strips for anchoring
- Install the HSI tablet and patch it into the correct port
  - Switch 2 port 21
- Locate the TFB tablet and leave it in the fixture for the store team to install during merchandising- We should install this
  - TFB tablet is an iPad so there is no patching needed. Shroud for TFB tablet is currently coming with merchandising shipment after turnover so must be set up by them at that point

## XW179 – Other Product Bento Box

*RT Equipment: Network Cash Drawer, Cisco VOIP phone*



- Locate the RT equipment for this fixture
- Place the cash drawer in the opening on the left side of the bento
- Patch it into one of the NCD ports
  - Switch 1 port 1 or 2, switch 2 port 1-3
- Plug the cash drawer into power

- **\*\*IMPORTANT\*\*** the cash drawer will function without a dedicated power supply but it will sound an alarm indefinitely when opened. Do not assume functionality means correct installation
- Anchor the drawer in place by screwing the provided thumb screws into the bottom of the cash drawer through the pre-drilled holes in the fixture
  - If the thumb screws are missing, they can be procured locally. Size is #10-32 x 1 ½”
  - Do not overtighten or screws will push against the sliding drawer insert and inhibit function
  - Use no less than 2 anchor screws (4 preferred) to prevent the cash drawer from sliding within the fixture
- Attach the cash drawer faceplate provided by the fixture team
- Place the Cisco phone in the non-locking drawer to the right of the cash drawer
- Patch it into one of the VOIP phone ports
  - Switch 1 port 41-48

## XW302/XW303 – Bopis/Grab and Go

*RT Equipment: Network Cash Drawer*

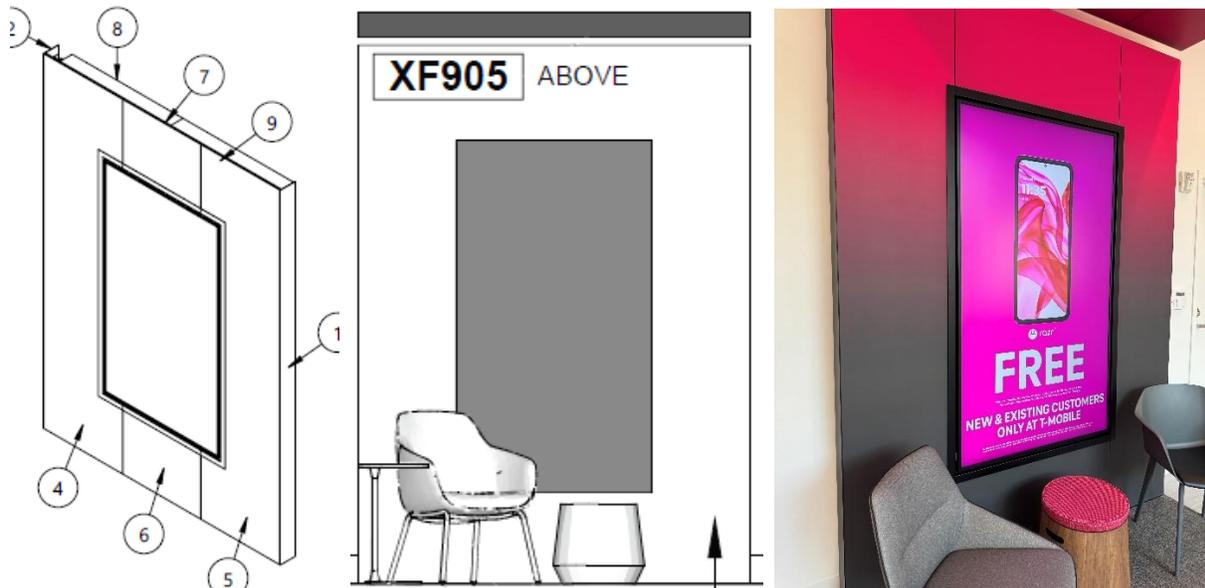


- Locate the RT equipment for this fixture
- Place the cash drawer in the opening on the left side of the bento
- Patch it into one of the NCD ports
  - Switch 1 port 1 or 2, switch 2 port 1-3
- Plug the cash drawer into power
  - **\*\*IMPORTANT\*\*** the cash drawer will function without a dedicated power supply but it will sound an alarm indefinitely when opened. Do not assume functionality means correct installation
- Anchor the drawer in place by screwing the provided thumb screws into the bottom of the cash drawer through the pre-drilled holes in the fixture

- If the thumb screws are missing, they can be procured locally. Size is #10-32 x 1 ½”
- Do not overtighten or screws will push against the sliding drawer insert and inhibit function
- Use no less than 2 anchor screws (4 preferred) to prevent the cash drawer from sliding within the fixture
- Attach the cash drawer faceplate provided by the fixture team

## XW471 – Brand Digital Portal Wall

RT Equipment: 75” Samsung Monitor (QM75C), one Media Player (VDS\_1 **or** VDS\_2)



- Locate the RT equipment for this fixture
- Unbox the media player, plug it into power, and patch it into the correct port
  - VDS\_1: switch 2 port 32, VDS\_2: switch 2 port 33
- Plug the HDMI cable into the ‘HDMI out’ port on the media player
- Install the monitor mount provided by the fixture team
- Attach the 75” monitor to the mount using provided hardware
  - Use two technicians to minimize risk of damaging monitor. If second tech is unavailable, request assistance from the GC
- Plug the monitor into power and connect the HDMI cable from the media player
- Ensure ECO settings are off on monitor

## Miscellaneous

### XW472 – Brand Portal Wall

*RT Equipment: LEDs*

- Ensure the 4 shielded cables for the LEDs are terminated into a keystone jack and pulled through the two access ports in the wall

### XF305/XF306 – Digital Welcome Cloud

*RT Equipment: LEDs*

- Ensure the shielded cables for the LEDs are terminated into a keystone jack and coiled in the ceiling above the cloud for future access

Picture:



### XF445/XF446 – Welcome Table

*RT Equipment: TBD*

### XF422/ XF423 - Device Depot

*RT Equipment: Demo cables (48)*

- Ensure we have 2 data pulled for this fixture. The data runs will be for future use.

- Locate the 48 demo device cables that came with the Connection shipment. Those cables will be used by the store staff to stock and charge their demo phones in the device depot. You will take the box of 48 cables and place it next to the Device Health Charger. You will need to place the box of 48 cables next to the Device Health Charger and take a picture of it as one of your deliverables.



Picture of Device Depot above.

Picture:



Picture of one of the 48 individually wrapped cables that the STORE MANAGER will place in side the device depot.

## OPS Depot

### RT Equipment: B/W Printer, Brother Label Printer

- 2 cable runs needed
- Install B/W Printer
- Install color printer

## APs

- If APs are new, unbox them, photograph claim codes on the back, and email to NRD at [NOC\\_Retail\\_Deployment@t-mobile.com](mailto:NOC_Retail_Deployment@t-mobile.com)

- If reusing existing devices, clean them as best as possible and relabeled to align with current TMO naming convention
  - Many of the existing APs, the labeling has yellowed and needs to be removed/re-labeled.
- Work with NRD to ensure APs are claimed, tested, and installed in the correct locations

# Back of House

## FG103 – Manager’s Desk

*RT Equipment: Manager’s PC, Cisco VOIP Phone, Cashmaster*

- Set up the manager’s PC and patch it into switch 1, port 30
- Set up the Cisco VOIP phone and patch it into switch 1, port 31
- Set up the Cashmaster and plug in to power (no network connection)

## FG205 – Training Cart

*RT Equipment: Training PC*

- Set up the training PC and patch it into switch 2, port 5

## ET102 – Multifunction Printer

*RT Equipment: Multifunction (Color) Printer*

- Place the MFP according to the plans and patch it into switch 1, port 25
- Add Printer Drivers to Manager Machine
- Before adding printers, the PC needs to have access to Z/Vendor drive. Most PCs will already have Vendor drive access. If the PC doesn't have access to the Z drive, see: [Mapping the Z:/Vendor Network Drive](#)
- **Adding Printers to Network**
- Open Devices and Printers:
- Check for existing printers, if any, best practice is to remove all old printers, then;
- Go to> Add a Printer
- Go to> Add a Local Printer
- If you had to remove existing printers check under Use existing port for the port of the printer you want to add , if there, click on it to use it, and click next (if not skip this step go to 4)
- 
- **Figure 1-1 Choose a Printer Port**
- If there was not an existing printer, click **Create a new port> Select standard TCP > Click on> Next**
- Hostname or IP address: enter IP of printer you are adding .ie 10.xxx.xxx.15; .16 .17 > Next
- 
- **Figure 1-2 Enter Printer IP Address**
- Click **Have Disk**
- 
- **Figure 1-3 Have Disk**
- Click **Browse**

- Navigate to c:\IT Resources\
- 
- **Figure 1-4 IT Resources**
- Go to **Xerox Universal Driver for 8580 and 8900 folder**
- these are old models, but they are universal drivers so it does not matter
- Open **X-GPD\_5.404.8.0\_PS\_x64\_Driver.inf**
- Open **X2univp.inf**
- Click **OK**
- Click **Xerox GPD PS 3.5.404.8.0**
- Click **Next**
- Enter printer name – (first 2 letters of State; 3 letters of City; Store number; C15 for MFP, C16 for the one in the ADA cabinet)
- Click **OK**
- Select **Do not share the printer:**
- Click **Next**, then **Finish**.
- Once test pages are printed, remove old drivers if applicable.
- 

## ET410 – Back of House Monitor

*RT Equipment: 50” Samsung Monitor, Scala Media Player*

- Attach the wall mount to the wall at the elevation specified in the design drawings
- Mount the Scala media player so that it will be hidden once the monitor is hung and patch it into switch 2, port 20
- Mount the monitor to the wall mount and connect the Scala via HDMI
- Ensure ECO settings are off on monitor

## REMO Health Charger

*RT Equipment: REMO Health Charger*

- Place the REMO health charger in the inventory room as indicated on the design drawings and patch it into switch 1, port 15
  - If store does not have an inventory room, health charger will be in a locking cabinet/cart with a dedicated fixture tag called out on the plans

## Digital Price Cards

Digital price cards will be included in the inventory. Leave next to Remo charger in inventory room with device depot charging cables- Take a picture of all of them

# Completion, Turnover & Audit

Once all equipment above has been installed and patched in, technician will call NRD and request a store scan to verify connectivity. After NRD confirms equipment is online and functioning as expected, technician will conduct a final walkthrough to photograph all RT equipment.

Regardless of progress, tech must take photos of equipment as installed no later than the Wednesday prior to turnover and submit to their PM for review to confirm we are tracking to scheduled EUS audit date.

## Turnover & Audit

Technician is expected to be onsite for scheduled turnover walkthrough with construction PM, GC site supervisor, and field staff. Unless previously arranged, T-Mobile EUS technician will also be onsite on this day to conduct the RT audit. Any RT issues called out during the walkthrough or audit should be corrected in real time, including documenting before and after correction.

**\*\*IF THE RT AUDIT IS HAPPENING ON A DIFFERENT DAY THAN THE TURNOVER WALKTHROUGH, LV TECHNICIAN IS EXPECTED TO BE ONSITE FOR BOTH\*\***

Any equipment not fully installed prior to turnover will need to be photographed during the audit to verify completion.

## Tazmanian Equipment Pick Up

Any RT equipment packed during decom that was not reinstalled will be picked up the week following turnover. After the turnover walkthrough is complete, the LV technician will confirm this excess equipment is still neatly packed and ready to be picked up. If the conex container is being removed prior to the Tazmanian pick up, LV technician will work with the GC and field staff to determine and move the equipment to a location inside the store that will not impact operations.

Technician will take photos of equipment once finalized and submit with other deliverables.

## Additional Scope Items (to be Quoted separately)

### Open Remodel

- Nighttime labor
  - o In the event a store will remain open for the Remodel, you will need to plan for nighttime labor.
- Floating the Rack
  - o In the event of an open remodel, you may be required to “float” the rack, which may require additional visits to temporarily place the rack until conditions are ripe for permanent installation.
- Temp POS setup (1 VOIP, 1 AP, 1 cash drawer, 1 printer, 1 Brother Label, 1 Device Wizard)
  - o In the event of an open remodel, you will need to install the following items at the front of the store inside the “temp POS fixture” on decom day:
    - 1 VOIP phone
    - 1 cash drawer
    - 1 Access Point (in ceiling above temp POS fixture)
    - 1 printer
    - 1 Brother Label Printer
    - 1 Device Wizard