BPI Checklist

+BPI Walk Checklist

What you will need to bring for walk

- Drill or screwdriver with flat head, phillips head, and security bit attachments
- Measuring tape (35 to 50ft) or roll tape, (some type of measuring device to take quick measurement of distances from MDF to new zone locations). **Do not use phone.**
- A Pen, a blue sharpie, and a red sharpie to draw symbols from device key on map.
- 6 ft. ladder if possible

Pictures!!!

Take pictures and put a check mark in each area when complete, (take multiple pictures of a classroom with walls ceiling clearly visible and take pictures of any varying layout of classrooms):

halls___, office___, gym___, aux gym___, Locker rooms___, auditorium___, Library___, classrooms___, bathrooms___, existing head-end (original intercom equipment) ___.

Note: 50 to 75 images will not be unusual for an elementary school, more for a middle or high school.

Documentation

- Request a map of the building before walk along with PDF (map with accurate measurements is better)
    - Compare actual room numbers while walking to the map and write down on the map if the numbers are different.
- Does customer want two-way paging capabilities in classrooms? (circle one) **Yes No**
- Mark existing firewalls on the map (if wall has double doors it is typically a fire wall)
- Ask customer if asbestos exists anywhere in school and mark on the map. Please provide details on location; is it in the wall, ceiling, etc.? _____
- Ask customer and mark any areas on the map that can be utilized for storage while doing the project (a central location is best).
- Can existing speaker wiring be reused? (circle one) **Yes No**
    - If the answer is no, does existing wire need to be removed? (circle one) **Yes No**
- What existing material is the customer expecting to be removed? (old unusable speakers, old head-end equipment, ceiling tiles with old speakers in them, etc..)
    - Can removed material be disposed of in school owned trash receptacles? (circle one) **Yes No**

Head End

- Mark on the map where the new head-end will be located with server, amplifier, and hubs. (this will be in the Main Data Closet or other data closet)
- Does rack in Main Data Closet have room for new equipment? (will need at least 7 units of space in rack) (circle one) **Yes No**
    - If room doesn't exist in existing rack for new equipment who will provide new rack?
- Does area where new-head end will be located have enough available network switch ports for equipment? (Will need a port for the server, and each common zone hub) (circle one) **Yes No**

- Does the new head-end location have accessible battery backup with room for amplifier and server to be plugged in? (circle one) **Yes No**
    - If not, who will be providing a new battery back up?
        - If Galaxy will be providing and installing new battery backup does room exist in rack where our equipment will be installed to install new battery back up? (circle one) **Yes No**

Zones

- What zones would the customer like? **Please fill in the zones table on counts page 4**.
  Example of Common Zone structure:
    1. **Halls** – hallways, small offices, workspaces, common rooms, closets (sometimes hallways are broken up into smaller zones like upstairs and downstairs using separate hubs for each)
    2. **Exterior**
    3. **Admin Office**
    4. **Counseling Office**
    5. **Cafeteria**
    6. **Gym** – large gym, auxiliary gym, locker rooms, and coach's office
- If ILC exists would the customer like a separate zone for this area to allow isolation from building wide bells and announcements?
- If map does not have accurate measurements, please provide measurements for distance from new head-end location to at least two of the specified zones and mark on map.
    1. Zone location_____ Distance from new head end_____ft.
    2. Zone location_____ Distance from new head end_____ft.

Speakers

- If customer would like to reuse existing speakers, what type are they? (check speakers in multiple locations)
    - Location_____Make_____ model_____ circle one - **25 volt 70 volt**
    - Location_____Make_____ model_____ circle one - **25 volt 70 volt**
    - Location_____Make_____ model_____ circle one - **25 volt 70 volt**
    - Location_____Make_____ model_____ circle one - **25 volt 70 volt**
        - If existing speaker is 25 volt we will need to replace.

- Is existing coverage sufficient? (should have a speaker every 15-20ft) (circle one) **Yes No**
- **Mark all speaker adds, replacements, and speakers that will be reused clearly on map with designated symbols from provided key on page 4 for each device**.
- If customer wants two-way paging in classrooms, would they like the clock speaker combo with call switch or just a call switch with a mic?
    - If clock speaker combo is requested does a usable data line exist in each room where IP clock will be installed? (circle one) **Yes No**
        - If no usable data line exists, who will be running the new data line?
          _____

- Mark all clocks and call switch locations on map with designate symbol from provided key on page 3.

- Is exterior coverage sufficient? **Yes No**
  - Suggest a speaker be installed about every 50 to 75 ft and mark locations on the map.
- **Please fill in speaker quantities in device table on counts page 4.**

Locations

- In the following section please circle material type or specify by writing down next to section. Mark on the map where elevation changes exist throughout hallways.

Hall

- Ceiling type (circle one) - **drop tile open ceiling hard panel(drywall)**

Bathroom

- Ceiling type (circle one) - **drop tile open ceiling hard panel(drywall)**
- Do bathrooms have access panels? If yes mark on map.

Classroom

- Ceiling type (circle one) - **drop tile open ceiling hard panel(drywall)**
- Wall type (circle one) – **drywall concrete block**
- Are there existing call switch locations that can be reutilized? (circle one) **Yes No**
- If no usable call switch location is existing does customer want call switches to be cut-in or surface mounted? (can only be cut in if the walls are drywall) Please circle one:
  Cut- In Surface Mount
  - If surface mount what material would they like for the pathway (circle one):
    Conduit Raceway

Device Key

Device	Symbol
Hub (POE Device)	H
IP clock speaker combo	C S
Secondary IP clock	C
Call switch (used with clock)	
Call switch with Mic (two way paging) needs hub	M
Ceiling tile 8 in round cut-in speak (Add)	
Ceiling tile 8 in round cut-in speak (Existing)	
1x2 Ceiling tile speaker (Add)	
1x2 Ceiling tile speaker (Existing)	
Wall mount 8" speaker (Add)	
Wall mount 8" speaker (Existing)	
Exterior horn quantity (Add)	
Exterior horn quantity (Existing)	
IP Strobe	

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Counts Page

This page contains a devices quantity table and a zone description and speaker quantity per zone table. Please fill out all applicable information in the designated table.

Device Table

Device	Quantity
IP clock speaker combo	
Secondary IP clock	
Call switch (used with clock)	
Call switch with Mic (two-way paging) needs hub	
Ceiling tile 8 in. round cut-in speak	
1x2 Ceiling tile speaker	
Wall mount 8 in. speaker with back can	
Exterior horn quantity	
Hub for common zones	
Hub for classrooms (two-way paging)	
Intercom Console (“bat phone”)	
Strobe	
Amplifier	
Uninterruptible Power Supply (UPS)	

Zone Table

Zone Description	Speaker Quantity
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

Appendix

Access Panel - A small metal, wood, or plastic door flush with a wall or ceiling surface which provides a closure over a valve or other operable device which is recessed into the wall or located above a ceiling.

Battery backup - An uninterruptible power supply (**UPS**), also known as a battery backup, provides backup power when your regular power source fails, or voltage drops to an unacceptable level. A **UPS** allows for the safe, orderly shutdown of a computer and connected equipment.

Conduit - An electrical conduit is a tube used to protect and route electrical wiring in a building or structure. ... Most conduit is rigid, but flexible conduit is used for some purposes. Conduit is generally installed by electricians at the site of installation of electrical equipment.

Cut-in – A cut in ring is a piece of hardware that fits into a hole that is cut into drywall and clamps down with the use of screw down arms. This is what the call switch and face plate will be screwed onto to.

Data line – A network cable that runs from the end point installation location to a switch in one of the various data closets. It provides direct hardwired access to the network.

Drop tile - A drop or dropped ceiling is the ceiling that is hung below the main (structural) ceiling. It may also be referred to as a false or suspended ceiling and is a staple of modern construction and architecture. The area above the dropped ceiling is called the plenum space, as it is usually used for the HVAC air return.

Firewalls - a wall or partition designed to inhibit or prevent the spread of fire. Marks a separation in sections of the school or building and usually has double doors dividing the sections.

Hard panel (drywall) - a type of board made from plaster, wood pulp, or other material, used especially to form the interior walls of houses.

Head-end – The location where the main parts (server, amplifier, and hubs) of the intercom system are house. Existing head-ends are normally in front office.

Hub – A POE device that is used to separate zones. The server tells the hub what message or sound to send to the amplifier to be amplified and sent to specified speakers on that amp channel.

ILC – Intensive learning center or special education.

Main Data Closet (MDF) – Short for ***m****ain* ***d****istribution* ***f****rame*, a cable rack that interconnects and manages the telecommunications wiring between itself and any number of IDFs. Unlike an IDF, which connects internal lines to the MDF, the MDF connects private or public lines coming into a building with the internal network. For example, an enterprise that encompasses a building with several floors may have one centralized MDF on the first floor and one IDF on each of the floors that is connected to the MDF.

POE – Powered over ethernet. These devices get their power through a network cable.

Open Ceiling – Trusses will be exposed.

Raceway – Wire molding that is externally wall mounted. This creates a protected pathway for wires to be run through.

Security bits - https://www.harborfreight.com/security-bit-set-33-pc-68459.html

Surface mounted – Mounted externally on wall.

Zone – Devices are organized into zones so they can be called or engaged in groups. A zone can include hubs and any other endpoint device.