

## System Configuration Worksheet

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### Total Speaker Load

Load is the sum of all the speakers in the system. Each speaker is added together at it's tap setting, 1/4 - 1/2 - 1 or 2W. For hallway speakers 1W is the most common. In smaller rooms 1/4 or 1/2 will usually be adequate. Total speaker load sets the system power, but it is a good idea to factor in some headroom for those areas that might need some extra output after the fact. Speakers can be tapped up if more volume is needed later. 20% headroom is a good figure.

\_\_\_\_\_ W

### # of Zones

In many structures a single speaker zone is all that is required. You may want to run multiple circuits for ease of wiring. In High Rise structures it is common to use at least 1 circuit per floor.

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(# of circuits, for Class B circuits zone splitters are grouped by 4. For Class A the grouping is 2.

### Class A or B

In single circuit systems, A or B is field selectable. In zoned systems it requires a part change or additional components. Please specify.

- Class B - Style Y  
 Class A - Style Z

### Are Fire Phones Required?

If you need fire phones, you are into a higher level system. Consult factory for high rise applications.

- Yes  No

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### Example: Typical systems

**A:** 18 speakers - 12 @ 1W, 6 @ 1/2W, single circuit Class B

Total Speaker Load -  $(12 \times 1) + (6 \times 0.5) = 15W$  / # of Zones - 1 / Class B

System Required - **EVAX 25** - 25W single circuit

**B:** 62 speakers - 32 @ 1W, 24 @ 1/2W, 6 @ 1/4W, 5 circuits Class B

Total Speaker Load -  $(32 \times 1) + (24 \times 0.5) + (6 \times 0.25) = 45.5W$  / # of Zones - 5 / Class B

System Required - **EVAX 50/8Z** - 50W 8 circuits

**NOTE:** Example B shows a system with only 4.5W of spare audio capacity. The EVAX 50 would provide adequate coverage for the conditions set, but would leave little room for error. A handful of speakers being tapped up from 1/2 to 1W would max out the system. Another alternative would be to use an EVAX 100/8Z, this would provide more than enough headroom for future expansion or last minute changes to bolster system audibility.