# Massachusetts Technology Assessment Committee (MTAC)

## Zoning Control

Date reviewed: 05/07/2018

### Description of Technology

Improve building comfort by accurately controlling temperatures at room level using the existing heating and/or cooling equipment with additional sensors and damper controls within the existing zones. This allows for shutting off conditioned air to any room that has reached its temperature setpoint independently of other rooms to reduce overheating and overcooling of spaces.

### Energy Saving Opportunity

| | | |
|---|---|---|
| Sector(s): | | Residential |
| | ☑ | Commercial & Industrial |
| Applicability Criteria: | Any building with central heat and limited thermostats. | |
| Efficiency Improvement: | Potential to reduce fuel by no longer overheating or overcooling rooms | |
| Energy (%) Savings Potential: | Highly variable (15% to 40%) | |
| Demand (%) Reduction Potential: | Highly variable | |

### Strengths

- Increased comfort with localized control for scheduling, occupancy, temperature settings and setbacks
- Centralized management and ability to monitor and adjust set points at the room level
- It can be used in many different sectors, such as offices, schools, retail, and hotel

### Weakness

- Increased comfort in a building may require more energy to achieve than the previous control method.
- Batteries in each room's smart controllers

### Third Party Analysis/ Previous MTAC Reviews

### Suppliers Known to MTAC

Emme

### MTAC Status

Acknowledged to have energy savings potential and referred to individual PA for their own EE program consideration

### Market Development Issues

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|---|---|
| Cost: | Estimate of $3-$5 per square foot |
| Market Risk and Barriers: | None |
| Time to Market: | Currently on market |
| Simple Pay-back: (Years) | Varies |