

CTA Bulletin

Home Theater HVAC

CTA/CEDIA-CEB24-A

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**Consumer
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Foreword

This bulletin was created by the CTA/CEDIA R10 Residential Systems Committee. This bulletin focuses on sound abatement (ingress and egress) for air handling equipment (including allowing for maximum dynamic range within the listening space) proper air exchanges and treating equipment racks and spaces to maintain adequate operating temperatures and humidity.

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1. Introduction

HVAC systems should be carefully designed to meet the special needs of the home theater room. First, the HVAC system should be properly sized to accommodate the added heat load generated by people and AV equipment. Secondly, the HVAC system should maintain a low background noise level even when operating under full load conditions. The objectives are to maintain the room's environment for:

- occupant comfort (temperature and humidity),
- safe equipment operating temperatures
- Noise-free acoustics.

Added heat loads, background noise specifications and ventilation requirements should be addressed very early with the HVAC designer/installer to ensure they are included in the design.

2. References

2.1 Informative References

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2.2 Informative Reference Acquisition

- ASHRAE Standards
American Society of Heating, Refrigerating and Air-Conditioning Engineers, 1791 Tullie Circle, N.E., Atlanta, GA 30329; Phone: 404-636-8400; Fax: 404-321-5478; Internet: <http://www.ashrae.org>