

## CHPS Criteria Interpretation [CCI-EQ-01] Published [4/4/2019]

**Topic:** Reverberation Time in Historic Building (Gym)

**Category:** Indoor Environmental Quality

### Applicable Prerequisites/Credits:

Edition	Criterion Number and Name
US-CHPS 2014/2016	EQ 14.0 Acoustical Performance
CA-CHPS 2014/2016	
NE-CHPS v3.x	
HI-CHPS 2012	EQ.P7 Minimum Acoustical Performance
TX-CHPS 2009/2015	EQ 3.0 Minimum Acoustical Performance, EQ 14.0 Acoustical Performance
VA-CHPS 2011	EQ.P8 Minimum Acoustical Performance

**Credit Interpretation Question:** The existing Gymnasium building has been designated as historic with both exterior and interior building elements identified that are to be retained/maintained as much as possible to avoid undermining the eligibility of the building as a historic resource and the overall campus as a historic district. Both the exterior windows and the exposed trusses and roof assembly within the Practice Gym space have been identified as character defining features and therefore it is recommended to minimize any alterations to their appearance. Per the CHPS 2014 V1.02, all primary teaching spaces must meet the pre-requisite EQ 14.0 acoustic criteria, which requires core learning spaces greater than 20,000 ft<sup>3</sup> and ancillary learning spaces a maximum reverberation time of 1.0-second, however the Practice Gym is used only occasionally for specific physical education classes and during inclement weather, and therefore the District is seeking an exemption from the EQ 14.0 reverberation time requirement for this space since it would be very challenging to achieve it without significantly altering the visual appearance and historical character of the exposed ceiling assembly.

**Credit Interpretation Ruling:** Generally speaking, CHPS prefers to hold schools to the high-performance acoustics standards for reverberation time found in CA-CHPS 2014. However, due to the historic nature of the gymnasium's interior and the relative lack of use of the gym, CHPS is waiving the requirement of EQ 14.0 Acoustical Performance to limit reverb time to 1.0 second for the gymnasium space (which is greater than 20,000 ft<sup>3</sup>).

Taking into account that the gym is used for special education classes and that usage may change over time, we do think reverberation should be addressed in order for the school to qualify as high performance. We strongly encourage the project consultants to model the gymnasium space for predicted reverberation time and take steps to limit it to the 1.5-2.0 seconds range at most.