



SUBJECT

Pneumatic Tube Systems Support and Bracing

PIN: 20

Effective: 1/30/1997

Revised: 6/09/2011



BACKGROUND

Pneumatic Tube Systems are generally considered a “secondary” system within a hospital building, used for the delivery of documents from one department to another.

Historically, OSHPD has reviewed the support and bracing of these piping systems as a field review. As such, these systems would only be reviewed by either a Compliance Officer or District Structural Engineer. Inconsistent interpretations of the California Building Code (CBC) have prompted the Pneumatic Tube Systems Association to write and request a consistent policy be issued on the subject.

POLICY

Details for the bracing and anchorage of piping associated with the installation of Pneumatic Tube Systems need not be provided to OSHPD for review.

Piping associated with these systems is generally light (4.5 lbs/lf) and has no weight inside the pipe except when the “slug” is moving from station to station. Details and calculations shall be required for the stations, diverters and blowers in accordance with Chapter 13 of ASCE 7-05 as modified by Sections 1613A and 1614A of the 2007/2010 CBC (Section 1632A.1 of the 2001 CBC). Separation of 6" between the pneumatic tube system piping and suspended ceiling lateral force bracing systems shall be provided in accordance with Cisca Guidelines for Seismic Restraint for Direct Hung Suspended Ceiling Assemblies, Seismic Zone 3 & 4 (2004), Installation Section 3 (Section 2501A.5.7.2 of the 2001 CBC). Fire protection issues are addressed in Chapter 7 of the 2001/2007/2010 CBC.

If a hospital desires the Pneumatic Tube System to be designed as an “essential system,” for continued operation following a seismic event, the piping system shall be braced in accordance with one of the OSHPD Pre-Approved Anchorage manuals using all schedules for 2½" diameter pipe. The maximum weight of this pipe is 7.9 lbs/lf compared to the 4.5 lbs/lf for the pneumatic system. An engineered bracing system could be submitted in lieu of utilizing OSHPD Pre-Approved Anchorage.

Original Signed

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06/09/11

Date