Copyright 2004 and 2005 by The American Institute of Architects (AIA)

Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

Modified by MSU Physical Plant / Engineering and Architectural Services

SECTION 210548 - VIBRATION CONTROLS FOR FIRE-SUPPRESSION PIPING AND EQUIPMENT

1. GENERAL
	* + 1. RELATED DOCUMENTS
				1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
			2. SUMMARY
				1. This Section includes the following:

Isolation pads.

Isolation mounts.

* + - 1. SUBMITTALS
				1. Product Data: For the following:

Include rated load, rated deflection, and overload capacity for each vibration isolation device.

Retain paragraph below if procedures for welder certification are retained in "Quality Assurance" Article.

* + - * 1. Welding certificates.
			1. QUALITY ASSURANCE

Delete first paragraph below if no welding. Retain "Welding certificates" Paragraph in "Submittals" Article if retaining below. AWS states that welding qualifications remain in effect indefinitely unless welding personnel have not welded for more than six months or there is a specific reason to question their ability.

* + - * 1. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
1. PRODUCTS
	* + 1. VIBRATION ISOLATORS
				1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

Kinetics Noise Control.

Mason Industries.

Vibration Eliminator Co., Inc.

Vibration Isolation.

Vibration Mountings & Controls, Inc.

* + - * 1. Pads: Arranged in single or multiple layers of sufficient stiffness for uniform loading over pad area, molded with a nonslip pattern and galvanized-steel baseplates, and factory cut to sizes that match requirements of supported equipment.

Resilient Material: Oil- and water-resistant neoprene.

* + - * 1. Mounts: Double-deflection type, with molded, oil-resistant rubber, hermetically sealed compressed fiberglass, or neoprene isolator elements with factory-drilled, encapsulated top plate for bolting to equipment and with baseplate for bolting to structure. Color-code or otherwise identify to indicate capacity range.

Materials: Cast-ductile-iron or welded steel housing containing two separate and opposing, oil-resistant rubber or neoprene elements that prevent central threaded element and attachment hardware from contacting the housing during normal operation.

Neoprene: Shock-absorbing materials compounded according to the standard for bridge-bearing neoprene as defined by AASHTO.

1. EXECUTION
	* + 1. EXAMINATION
				1. Examine areas and equipment to receive vibration isolation control devices for compliance with requirements for installation tolerances and other conditions affecting performance.
				2. Examine roughing-in of reinforcement and cast-in-place anchors to verify actual locations before installation.
				3. Proceed with installation only after unsatisfactory conditions have been corrected.
			2. APPLICATIONS
				1. Multiple Pipe Supports: Secure pipes to trapeze member with clamps approved for application by an agency acceptable to authorities having jurisdiction.
			3. VIBRATION-CONTROL INSTALLATION
				1. Attachment to Structure: If specific attachment is not indicated, anchor bracing to structure at flanges of beams, at upper truss chords of bar joists, or at concrete members.
				2. Drilled-in Anchors:

Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Do not damage existing reinforcing or embedded items during coring or drilling. Notify the structural engineer if reinforcing steel or other embedded items are encountered during drilling. Locate and avoid prestressed tendons, electrical and telecommunications conduit, and gas lines.

Do not drill holes in concrete or masonry until concrete, mortar, or grout has achieved full design strength.

Set anchors to manufacturer's recommended torque, using a torque wrench.

Install zinc-coated steel anchors for interior and stainless-steel anchors for exterior applications.

END OF SECTION 210548