

SUBJECT:**DYNA-TITE SUSPENSION SYSTEM****ACTION:**

Section 5.2.11 of the Third edition of HVAC Duct Construction Standards Metal and Flexible states “The selection of a hanging system should not be taken lightly not only because it involves a significant portion of the erection labor, but also because an inadequate hanging system can be disastrous. In any multiple hangar system, the failure of one hangar transfers its load to adjacent hangers. If one of these fails, an even greater load is transferred to the next. The result is a cascading failure in which an entire run of duct might fall.

“There are many hangar alternatives, especially in the upper attachments. Besides structural adequacy, the contractor’s choice of hanging system must also take into account the particulars of the building structure, the skills of the workmen, the availability of tooling and the recommendations of the fastener manufacturer. Because of these variables, it is suggested that the hanging system be the contractor’s choice, subject to the approval of the mechanical engineer”

Duro Dyne has gone to great lengths of engineering, and testing to insure the contractor of a safe and reliable product for supporting ductwork. Installation Instructions and recommendations are supplied both with the product and also are available on our website. We would like to take this opportunity to remind contractors of some important points in those documents and to expound on them.

1. “The Dyna-Tite assembly must be located no closer than 12 inches to the suspension point. Where the wire rope encircles the duct, the Dyna-Tite must be located the distance of one diameter from the duct wall.” – The purpose of this is to eliminate undue stress on the side walls of the Dyna-Tite enclosure. In situations where this is not possible we would recommend that a single sling be made utilizing a single Dyna-Tite.
2. “Do not use for lifting: This product is designed for static load applications only.” – Dyna-Tites are designed for 100% engagement of the pawl 100% of the time and to always be under load. If the load is removed from the Dyna-Tite, even for a short time, the pawl could become disengaged from the cable and slip.

Because of this – it is highly recommended that Dyna-Tites installed in open air spaces, such as a gymnasium, where the possibility of the duct being struck, be installed either with a secondary cable restraint or by using Dyna-Tites with the locking screw option to prevent any pawl movement.

3. “To ensure hanging system integrity and safety: Use only Duro Dyne wire rope” – Duro Dyne inspects and tests all wire rope it purchases and sells to ensure it meets stringent specifications. Buying rope from other sources that may look like they have the same basic configuration and/or dimensions and specifications, may indeed be substandard.

Duro Dyne Territory Managers, Customer Service, and our Engineering team are always available for consultation on any application questions or concerns, however the ultimate decision as to the application in a particular situation lies with the contractor together with the project engineer.