

SUBMITTAL RECORD

JOB _____
 LOCATION _____
 SUBMITTED TO _____
 SUBMITTAL PREPARED BY _____
 APPROVED BY _____
 DATE _____



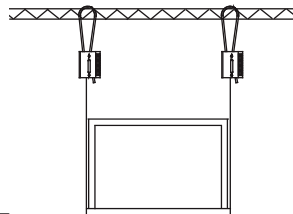
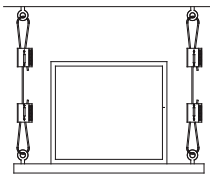
Submittal Form CL12-WC3 Cable Lock & Wire Rope

Description	Construction	For Use With	Safe Working Load*+
CL12-WC3 Cable Lock	Stainless Steel Sintered Steel Zinc Alloy	WC3 Wire Rope	25-150 lbs. (12-68 kg)

*Safe Working Loads are based on a 5:1 Safety Factor.

+Hanging at angles will reduce the Safe Working Loads. Please see our 'Effects of Hanging at Angles' table on our website at: www.durodyne.com/DTTesting.php

PATENT # 6,546,600



RECTANGULAR DUCT HANGING TABLE

Maximum Half of Duct Perimeter	10 ft Spacing 1 Pair	8 ft Spacing 1 Pair	5 ft Spacing 1 Pair	4 ft Spacing 1 Pair
p/2 = 30"	WC3-CL12	WC3-CL12	WC3-CL12	WC3-CL12
p/2 = 72"	N/A	WC3-CL12	WC3-CL12	WC3-CL12
p/2 = 96"	N/A	N/A	WC3-CL12	WC3-CL12
p/2 = 120"	N/A	N/A	WC3-CL12	WC3-CL12

ROUND DUCT HANGING TABLE

Maximum Round Pipe Diameter	10 ft Spacing Single Wire	8 ft Spacing Single Wire	5 ft Spacing Single Wire	4 ft Spacing Single Wire
10"	WC3-CL12	WC3-CL12	WC3-CL12	WC3-CL12
18"	WC3-CL12	WC3-CL12	WC3-CL12	WC3-CL12
24"	N/A	WC3-CL12	WC3-CL12	WC3-CL12
36"	N/A	N/A	WC3-CL12	WC3-CL12
50"	N/A	N/A	N/A	WC3-CL12

NOTES:

- Tables are calculated using a normal duct construction and reinforcement weight as outlined in SMACNA Duct Construction Standards.
- For special applications refer to specification table of working load limits.

The term cable is often used interchangeably with wire rope. However, in general, wire rope refers to diameters larger than 3/8 inch. Sizes smaller than this are designated as cable.

FOR STATIC LOAD APPLICATIONS ONLY

USE ONLY WC3-CL12 WIRE ROPE SUPPLIED BY DURO DYNE WITH THE DYNA-TITE CL12-WC3 CABLE LOCK.

SUGGESTED SPECIFICATION:

All ductwork and equipment shall be supported using wire rope cable terminated by Cable Locks. All Cable Locks shall have an Ultimate Breaking Strength (U.B.S.) of at least 5 times the published Working Load Limit (W.L.L.). Wire ropes shall be of the size and spaced per manufacturers printed specifications. Wire Rope and Cable Locks shall be as supplied by Duro Dyne Corporation.

SPECIFICATION DATA

- All wire rope supplied by Duro Dyne is statistically tested to minimum breaking strength.
- Dyna-Tite Suspension System has been submitted and tested to be an acceptable alternative to the duct hanger systems prescribed in SMACNA HVAC-DCS 2nd edition By SMACNA Testing & Research Institute.
- All Working Load Ratings of Dyna-Tite Cable Locks manufactured by Duro Dyne have been witnessed and verified by Independent Testing Labs.
- Dyna-Tite Cable Locks may be used in temperatures up to 300 degrees F.
- Dyna-Tite Cable Locks wedges are constructed of corrosion resistant sintered steel.
- Dyna-Tite Cable Lock springs are constructed of tempered stainless steel.

WIRE ROPE SPECIFICATION CARBON STEEL & GALVANIZED

Galvanized steel wire rope, supplied by Duro Dyne is manufactured to exacting standards and statistically tested to verify the breaking strength. Only use wire rope supplied by Duro Dyne. The chart below outlines the specifications.

Wire Rope Size	Tolerance	Rope Construction
WC3	+0.012 / - .006	7x7

APPLICABLE SMACNA STANDARD

4.2.11 Hanging System Selection

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 hanging system, the failure of one hanger transfers that load to adjacent hangers. If one of these fail, an even greater load is transferred to the next. The result is a cascading failure in which an entire run of duct might fail.

There are many hanger 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 worker, 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.

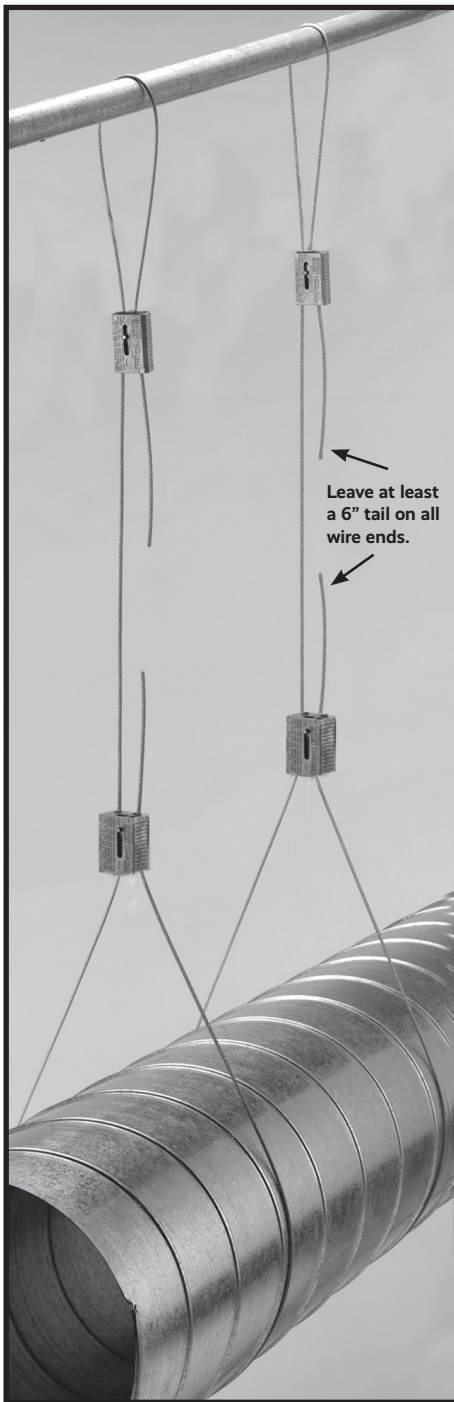
Please see our Dyna-Tite testing and warnings webpage for the most detailed list of warnings:
<http://www.durodyne.com/DTTesting.php>

For technical assistance:

nsiindustries.com/dyna-tite • hvactechteam@nsiindustries.com • 800.899.3876



Duro Dyne Dyna-Tite CL12-WC3 Cable Lock Assembly Instructions and Warnings



As a matter of sound engineering practice, the Dyna-Tite assembly must be located no closer than 12 inches to the suspension point. In the case of round duct, where the wire rope encircles the duct, the Dyna-Tite must be located the distance of one diameter from the duct wall.

Adherence to these minimum clearances will distribute the load efficiently among all duct hanging components.



STANDARD ASSEMBLY

STEP 1 Pull the release pin back and thread the wire rope into one locking channel in the cable lock. Failure to pull adjustment pin first may cause damage to serrated teeth and reduce holding capacity.

STEP 2 Pass the wire rope "tail" through (or around) the anchor point (Eyehook, Beam, or Purlin).

STEP 3 Pull the second release pin back and push the wire rope tail into the second locking channel in the cable lock. **Push through at least six inches.**

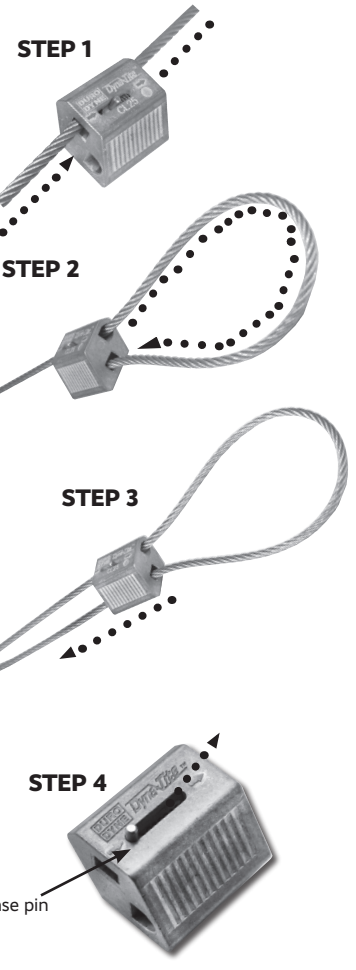
STEP 4 Prior to the load being applied, the wire rope can be adjusted in either direction by sliding the release pin and moving the wire.

ALWAYS CONFIRM ENGAGEMENT OF CABLE LOCK ON WIRE BEFORE APPLYING THE LOAD BY PUSHING THE ADJUSTMENT PIN IN THE OPPOSITE DIRECTION OF THE ARROWS ON THE CABLE LOCK AND THEN PULLING THE CABLE, ALSO IN THE OPPOSITE DIRECTION OF THE ARROWS ON THE CABLE LOCK.

Adjusting The Cable Lock

With the load off the wire rope and the Cable Lock, push the release pin in the direction of the arrow on the Cable Lock. This will release the locking pawl and allow the wire rope to be moved freely in either direction. (After a load has been applied it may be necessary to pull the cable slightly to disengage the teeth on the pawl). Be sure the load is fully supported before attempting an adjustment.

CL12-WC3



WARNINGS

ALWAYS CONFIRM ENGAGEMENT OF CABLE LOCK ON WIRE BEFORE APPLYING THE LOAD: By pushing the adjustment pin in the opposite direction of the arrows on the cable lock and then pulling the cable also in the opposite direction of the arrows on the cable lock.

PULL ADJUSTMENT PIN BACK AND PASS WIRE ROPE THROUGH DYNA-TITE CABLE LOCK: Failure to pull adjustment pin first may cause damage to serrated teeth and reduce holding capacity. **TO ENSURE HANGING SYSTEM INTEGRITY AND SAFETY:** Use only Duro Dyne wire rope.

WORKING LOAD LIMIT (WLL) MUST FALL WITHIN THE STATED WORKING LOAD RANGE OF THE CABLE LOCK: Each product is load rated and incorporates a minimum safety factor of 5:1. This WLL takes into account the specification criteria of the Dyna-Tite Cable Lock and the wire rope.

DO NOT USE ON COATED WIRE ROPE: It is important to maintain the metal to metal contact between the locking pawls in the Dyna-Tite and the wire rope.

SPRAY PAINTING: of the Dyna-Tite Cable Hanging System after installation is acceptable, at the installing contractor's discretion, if the installing contractor physically confirms engagement of each cable lock on the cable prior to and after painting, and in strict accordance with the Dyna-Tite Installation Instructions. Brush painting is not acceptable. Do not paint Cable or Cable Lock prior to installation. Do not reposition Cable Lock after painting.

DO NOT APPLY LUBRICANT: to any part of the assembly as this will alter the surface nature of the wire rope and attract dirt and debris.

DO NOT USE FOR LIFTING: (Under Hook slings) This product is designed for static load applications only.

KEEP THE PRODUCT CLEAN AND FREE FROM DIRT: Any dirt should be removed from the product prior to assembly.

INSPECT PERIODICALLY: Upon inspection, discard and replace if worn, distorted, or damaged.

REMOVE DAMAGED WIRE ENDS: Using a designated pair of wire rope cutters prior to inserting into the Dyna-Tite Cable Lock.

WHEN INSTALLING DURO DYNE DYNA-TITE CABLE ATTACHMENTS: to buildings or equipment careful consideration must be made to the attachment method and the material being attached to. It is the responsibility of the installer for the proper selection, installation and appropriateness of the attachment to the job specifications and any codes. Duro Dyne can give general guidance, but any questions regarding this should ultimately be directed to the project engineer of the job.

FOR DRY LOCATIONS ONLY

DO NOT USE IN CHLORINATED ATMOSPHERES SUCH AS POOLS AND NATATORIUM GYMNASIUM INSTALLS MUST BE USING LOCKING CABLE LOCKS ONLY

Please see our Dyna-Tite testing and warnings webpage for the most detailed list of warnings:
<http://www.durodyne.com/DTTesting.php>