ICC-ES PMG Listing

PMG-1032

Effective Date: July 1, 2011
This listing is subject to re-examination in one year.

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CSI: DIVISION: 23 00 00—MECHANICAL
Section: 23 33 46.13—Hangers and Supports for Flexible Ducts

Product certification system:

The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.

Product: Duct Saddle Models DS456, DS712, and DS1420

Listee: Duct Saddle, LLC
1828 Carol Sue Avenue
Gretna, Louisiana 70056

Compliance with the following codes:

2006, 2009, 2012 *International Mechanical Code*® (IMC)
2006, 2009, 2012 *International Residential Code*® (IRC)
2006, 2009 IAPMO *Uniform Mechanical Code* (IAPMO UMC)*

**Uniform Mechanical Code* is a copyrighted publication of the International Association of Plumbing and Mechanical Officials, 5001 East Philadelphia Street, Ontario, California 91761.

Compliance with the following standard:

ASTM A 653

Identification:

Each Duct Saddle support bears a label displaying the name of the report holder (Duct Saddle, LLC), the date of manufacture, and either the ICC-ES evaluation report number (ESR-1508) or the ICC-ES PMG listing number (PMG-1032) and/or the ICC-ES PMG listing mark.

Installation:

The flexible duct must conform to Chapter 6 of the IMC or Chapter 16 of the IRC, as applicable, and must be installed in accordance with the manufacturer's installation instructions.

Resistance to seismic forces must be determined for duct supports and provided to the code official for approval. The calculations must be performed by a registered design professional. The calculated seismic forces must be less than the allowable loads shown in Table 1.

Exceptions:
a. When located in Seismic Design Category A or B regardless of the Importance Factor (I_p) value.

b. When located in Seismic Design Category C if the Importance Factor (I_p) = 1.0.
c. When located in Seismic Design Category C, D, E, or F and weigh 5 pounds per linear foot or less regardless of the Importance Factor (I_p) value.
d. When located in Seismic Design Categories A, B, C, D, E or F, and the Importance Factor (I_p) = 1.0.

TABLE 1—MAXIMUM LOAD CAPACITY[1]

TYPE OF LOAD FOR TYPE OF INSTALLATION	ANGLE FROM VERTICAL (degrees)				
	0º (Vertical)	**5º**	**10º**	**15º**	**20º**
Compressive load capacity (pounds)[2]	251	250	247	242	236
Tension load capacity (pounds)[3]	96	95	94	92	90

[1]Loads shown reflect a safety factor of 3.
[2]Where installed connected to ceiling joist. The duct load is transferred down through the support pole to the ceiling joists.
[3]Where installed connected to roof rafters. The duct load is transferred upward and into the structure from above.

Models: Duct Saddle is designed to support or suspend flexible air duct above the ceiling insulation and is composed of two distinct parts, the saddle and the support pole. Both the saddle and the support pole are fabricated from 24 gage, galvanized, ASTM A 653 steel with a minimum base-metal thickness of 0.023 inch (0.584 mm). (See Figure 1.)

The saddle is a 6-inch-wide (152.4 mm) "C" shaped section into which the duct is placed. Duct loads are transferred from the saddle to the structure through a support pole. The support pole consists of a 17-inch-long (431.8 mm), $1^1/_2$-inch-wide-by-$1^1/_4$-inch-deep (25.4 by 19.05 mm) channel. The support channel is factory-riveted to a tab which allows the saddle to rotate to align with the duct. The other end of the support pole is then attached to wood-framing members elevating the saddle and the supported duct, as desired. The support pole can be attached to wood support members either above or below the duct, with a maximum installed deviation from vertical of 20 degrees. A 6-inch-wide (152.4 mm), 0.013-inch-thick (0.33 mm) collar snaps into prepunched holes and grooves in the saddle to hold the duct when the support channel is attached from above.

Duct Saddle is manufactured in three models to support the various diameters of flexible air duct:

Model DS 456 supports ducts from 4 to 6 inches (101.6 to 152.4 mm) in diameter.

Model DS 712 supports ducts from 7 to 12 inches (177.8 by 304.8 mm) in diameter.

Model DS 1420 supports ducts from 14 to 20 inches (355.6 by 508 mm) in diameter.

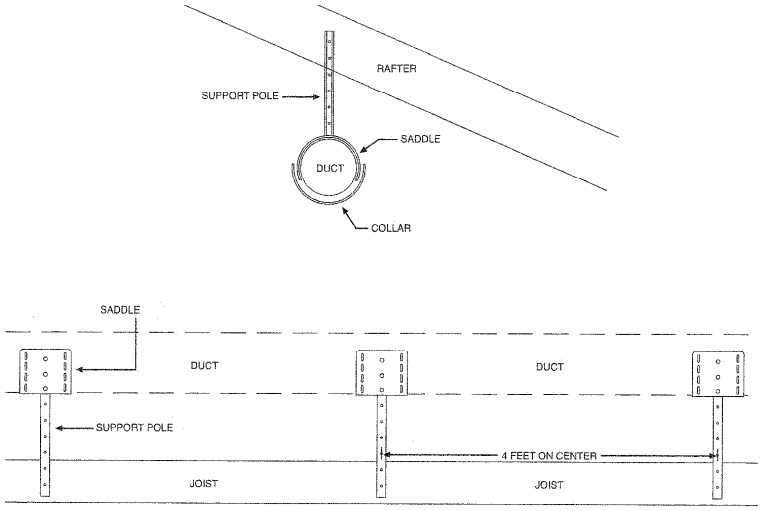

FIGURE 1—DUCT SADDLE