



Effective Date: February 2025

This listing is subject to re-examination in one year.



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CSI: DIVISION: 22 00 00 — PLUMBING  
Section: 22 05 29 — Hangers and Supports for Plumbing Piping and Equipment

DIVISION: 23 00 00 — HEATING, VENTILATING AND AIR CONDITIONING (HVAC)  
Section: 23 05 29 — Hangers and Supports for HVAC Piping and Equipment

### 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: Hangers for Pipe, Duct and Conduit Support

Listee: DEWALT  
701 East Joppa Road  
Towson, Maryland 21286  
[www.DEWALT.com](http://www.DEWALT.com)

### Compliance with the following codes:

- 2024, 2021, 2018, 2015, 2012 and 2009 *International Fuel Gas Code*® (IFGC)
- 2024, 2021, 2018, 2015, 2012 and 2009 *International Mechanical Code*® (IMC)
- 2024, 2021, 2018, 2015, 2012 and 2009 *International Plumbing Code*® (IPC)
- 2024, 2021, 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)
- 2024, 2021, 2018, 2015, 2012 and 2009 *Uniform Mechanical Code*® (UMC)\*
- 2024, 2021, 2018, 2015, 2012 and 2009 *Uniform Plumbing Code*® (UPC)\*
- 2022, 2019, 2016, 2013 and 2010 *California Mechanical Code* (CMC)
- 2022, 2019, 2016, 2013 and 2010 *California Plumbing Code* (CPC)
- 2023, 2020 and 2017 *City of Los Angeles Mechanical Code*
- 2023, 2020 and 2017 *City of Los Angeles Plumbing Code*
- 2017, and 2013 *District of Columbia Plumbing Code*
- 2023, 2020 and 2017 *Florida Building Code – Mechanical*
- 2024, 2020 and 2017 *Florida Building Code – Plumbing*
- 2020 and 2015 *New York State Mechanical Code*
- 2020 and 2015 *New York State Plumbing Code*
- 2022 and 2014 *New York City Mechanical Code*
- 2022 and 2014 *New York City Plumbing Code*
- 2020 and 2015 *Minnesota Plumbing Code*
- 2021, 2018 and 2015 *Michigan Plumbing Code*
- Municipal Code of Chicago Title 14M Interim Mechanical Code*
- Municipal Code of Chicago Title 14P Interim Plumbing Code*
- 2023 and 2017 *Code of Massachusetts Regulation 248 CMR 10.00: Uniform State Plumbing Code*
- 2023 and 2017 *Massachusetts State Building Code 780 CMR Ninth Edition: Chapter 28*
- 2022 *Uniform Illustrated Plumbing Code – India (UIPC-I)\**

\*Uniform Mechanical Code and Uniform Plumbing Code are copyrighted publications of the International Association of Plumbing and Mechanical Officials

Listings are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the listing or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this listing, or as to any product covered by the listing.

Compliance with the following standards:

- ASME B31.9-2020, Building Services Piping
- ICC-ES PMG LC 1041 (February 2017) Listing Criteria for Pipe, Duct, Conduit Support and Hangers
- MSS SP-58-2018, Pipe Hangers and Supports Materials, Design, Manufacture, Selection, Application, and Installation
- IAPMO PS95-2018e2, Drain, Waste, and Vent Hangers and Plastic Pipe Support Hooks
- SMACNA HVAC Duct Construction Standards, 4<sup>th</sup> edition, Chapter 5, Table 5-1, 5-1M and 5-2

Identification:

The DEWALT TOUGHWIRE™ Hangers for Pipe, Duct and Conduit Support shall be permanently marked with the followings:

- (a) Manufacturer’s name or trademark

Packaging shall be marked with the followings:

- (a) Manufacturer’s name or trademark
- (b) Product code
- (c) Maximum load rating
- (d) ICC-ES PMG listing mark

Installation:

Installation on grease or oil substrates is outside scope of this certification listing.

The DEWALT TOUGHWIRE™ Hangers for Pipe, Duct and Conduit Support recognized in this report shall be installed in accordance with manufacturer’s published installation instructions and applicable codes.

Models:

The DEWALT Hangers for Pipe, Duct and Conduit Support have been evaluated and proved to comply with LC1041. Table 1 different types of hangers and their maximum load rating at safety factory of 4:1. The load rating in table 1 is based on the suspension being hung vertically.

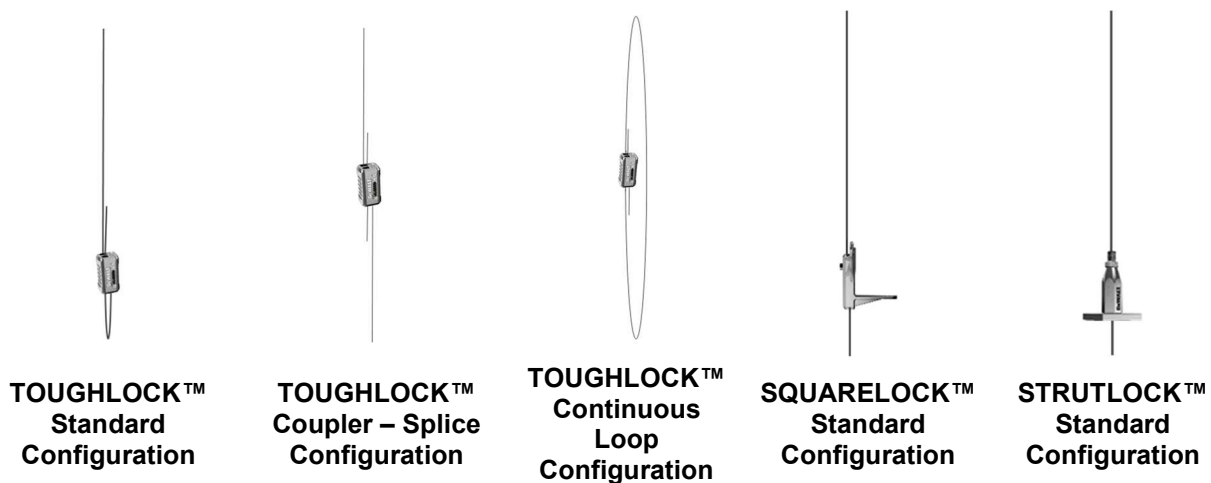
**Table 1 – TOUGHWIRE™ Device Models and Vertical Load Rating<sup>1</sup>**

Hanger Type	Hanger Configuration	Hanger and Wire Size	Maximum Allowable Vertical Load Rating (lbs.)
TOUGHLOCK™	Standard Loop	DW1	40
		DW2	125
		DW3	300
	Coupler – Splice	DW1	20
		DW2	65
		DW3	150
	Coupler – Continuous Loop	DW1	40
		DW2	125
		DW3	300
SQUARELOCK™	Standard	DW2	100
		DW3	250
STRUTLOCK™	Standard	DW2	100
		DW3	200

<sup>1</sup>For hanging wire rope suspended at an angle, the angle between rope and vertical position shall not exceed 60 degrees. The load capacity of the overall suspension is reduced as shown in Table 2.

**Table 2 – Maximum Angled Load Rating of TOUGHWIRE™ Devices**

Hanger Type	Hanger Configuration	Hanger and Wire Size	Maximum Load at Angle from Vertical (lbs.)					
			0°	10°	15°	30°	45°	60°
TOUGHLOCK™	Standard	DW1	40	40	40	40	28	20
		DW2	125	125	125	125	88	63
		DW3	300	300	300	300	212	150
	Coupler – Splice	DW1	20	20	19	17	14	10
		DW2	65	64	63	56	46	33
		DW3	150	148	145	130	106	75
	Coupler – Continuous Loop	DW1	40	40	40	40	28	20
		DW2	125	125	125	125	88	63
		DW3	300	300	300	300	212	150
SQUARELOCK™	Standard	DW2	100	100	100	–	–	–
		DW3	250	250	250	–	–	–
STRUTLOCK™	Standard	DW2	100	98	–	–	–	–
		DW3	200	197	–	–	–	–



**Table 3 – TOUGHWIRE™ Attachments, Components and Accessories<sup>1,2</sup>**

Type	Hanger and Wire Size(s)
<b>TOUGHWIRE™ Attachments</b>	
Loop End Assembly	DW1, DW2, DW3
3/8"-16 x 2" Threaded Stud Assembly	DW2, DW3
3/8"-16 x 5" Threaded Stud Assembly	DW2, DW3
Tie-Wire Assembly	DW2, DW3
STICK-E™ 90° Clip Assembly	DW1
Powder Pin 90° Clip Assembly	DW1, DW2
<b>TOUGHWIRE™ Accessories</b>	
3/8"-16 x 2" Threaded Stud	DW1, DW2, DW3
3/8"-16 x 5" Threaded Stud	DW1, DW2, DW3
D-Clip- 5/16" Hole	DW1, DW2, DW3
D-Clip – 1/2" Hole	DW1, DW2, DW3
<b>TOUGHWIRE™ Components</b>	
Cable Spool	DW1, DW2, DW3

<sup>1</sup>Hanger and wire size(s) are applicable to the hanger type and hanger configuration as mentioned above.

<sup>2</sup>The connection to the structure with certain attachments and/or accessories may limit the load rating. Refer to DEWALT's published technical literature for information.

Conditions of listing:

1. Seismic forces calculation must be prepared by a registered design professional when required by the statutes of the jurisdiction in which project is to be constructed.
2. For piping system, the interval of the support shall be engineered in accordance with local plumbing or mechanical codes.
3. Installation on grease or oil substrates is outside scope of this certification listing.
4. The DEWALT Hangers for Pipe, Duct and Conduit Support shall be installed in accordance with manufacturer's published installation instructions and applicable codes.
5. The DEWALT Hangers for Pipe, Duct and Conduit Support are manufactured under a quality control system with annual surveillance inspection with ICC-ES.

**TOUGHWIRE™ DEVICES, ATTACHMENTS, COMPONENTS AND ACCESSORIES**



**TOUGHLOCK™ Device**



**STRUTLOCK™ Device**



**SQUARELOCK™ Device**



**Loop End Assembly**



**3/8\"-16 x 2\" Threaded Stud Assembly**



**3/8\"-16 x 5\" Threaded Stud Assembly**



**Tie-Wire Assembly**



**STICK-E™ 90° Clip Assembly**



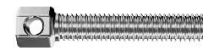
**Powder Pin 90° Clip Assembly**



**D-Clip - 5/16\" Hole**



**D-Clip - 1/2\" Hole**



**3/8\"-16 x 2\" Threaded Stud**



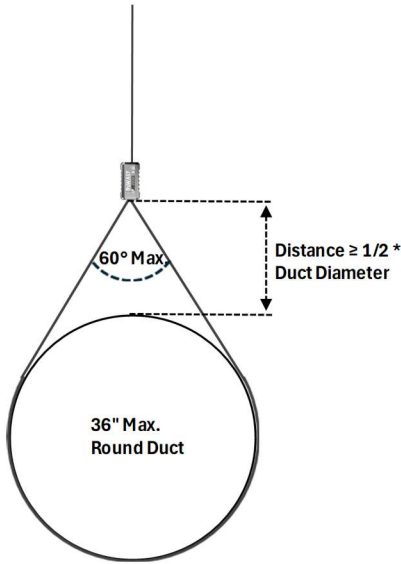
**3/8\"-16 x 5\" Threaded Stud**



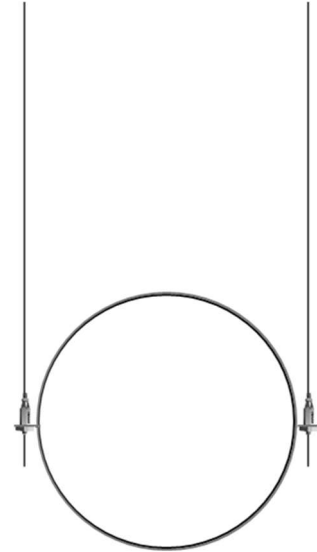
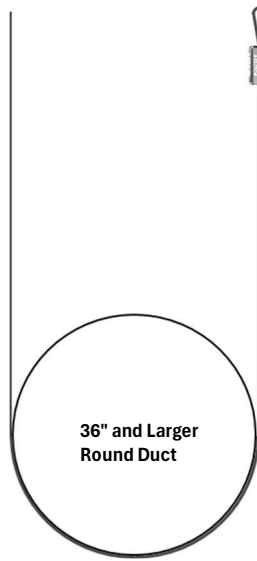
**Cable Spool**

*Note: DEWALT products shown are typical examples of products listed in this report that can be used for installations in accordance with the codes and following manufacturer's installation instructions.*

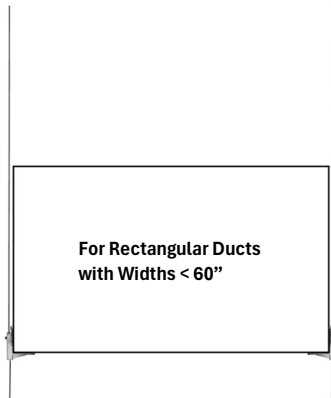
TYPICAL DUCT INSTALLATION DETAIL PER SMACNA DCS CH. 5 FIGURE 5-5 FOR TOUGHWIRE™



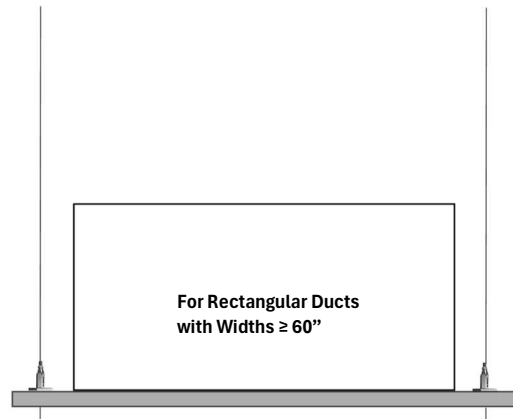
Spiral/Round Duct Installation with TOUGHLOCK™



Spiral/Round Duct Installation with Saddle Hanger and STRUTLOCK™



Rectangular Duct Installation with SQUARELOCK™



Rectangular Duct Trapeze Installation with STRUTLOCK™

Note: DEWALT products shown on the detail are typical examples and other DEWALT products listed in this listing report that can be used for similar installations following manufacturer's installation instructions.

**TYPICAL EXAMPLE PIPE AND CONDUIT INSTALLATION DETAILS FOR TOUGHWIRE™**



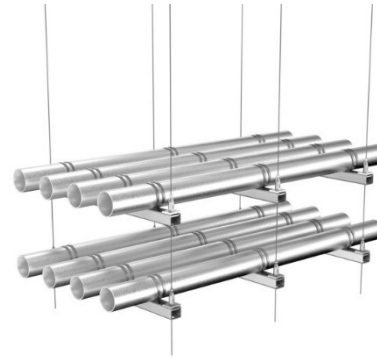
**Pipe/Conduit Installation with TOUGHLOCK™**



**Pipe/Conduit Installation with Clevis Hanger and STRUTLOCK™**



**Pipe/Conduit Trapeze Installation with STRUTLOCK™**



**Two Tier Pipe/Conduit Trapeze Installation with STRUTLOCK™**

**Note:**

1. Details shown are compliant with ANSI/MSS SP-58, and IAPMO PS-95. Dimensions and connections to structure will vary based on site conditions. Refer Table 1 and 2 for the safe working loads and limitations of use.
2. DEWALT products shown on the detail are typical examples and other DEWALT products listed in this listing report that can be used for similar installations following manufacturer's installation instructions.