



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: Gripple Inc.
1611 Emily Lane
Aurora, Illinois 60502
www.gripple.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)*
 - 2020, 2015 and 2010 *National Plumbing Code Canada*® (NPC)**
 - 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 and 2017 *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
- UL 2239 - 2nd Ed. Hardware for the Support of Conduit, Tubing and Cable
- 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, 4th edition, Chapter 5, Table 5-1, 5-1M and 5-2

Identification:

Gripple’s Hangers for Pipe, Duct and Conduit Support shall be permanently marked with the followings:

- (a) Manufacturer’s name or trademark
- (b) Product code
- (c) Maximum load rating

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.

Gripple’s 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:

Gripple’s 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 3:1. The load rating in table 1 is based on the suspension being hung vertically.

Table 1 – Hanger Type and Vertical Load Rating

Hanger Type and Size	Maximum Vertical Load Rating
Duct Trapeze	
DT2	100 lbs (45 kg)
Butterfly Trapeze	
BT2	100 lbs (45 kg)
Express Range	
XP1	33 lbs (15 kg)
XP2	100 lbs (45 kg)
Hang Fast	
HF1	22 lbs (10 kg)
HF2	100 lbs (45 kg)
HF3	200 lbs (90 kg)
HF4	496 lbs (225 kg)
HF5	716 lbs (325 kg)
Trapeze	

TZ2	200 lbs (90 kg)
TZ3	496 lbs (225 kg)
TZ4	716 lbs (325 kg)
Trapeze Plus	
MTZ2	200 lbs (90 kg)
MTZ3	496 lbs (225 kg)
MTZ4	716 lbs (325 kg)
Y-fit	
YHF1 / AY1	22 lbs (10 kg)
YHF2 / AY2	100 lbs (45 kg)
YHF3 / AY3	200 lbs (90 kg)
Unigrip	
UG2	120 lbs (55 kg)
UG3	240 lbs (110 Kg)
UG4	550 lbs (250 Kg)
UG6	800 lbs (363 Kg)

For hanging wire rope suspended at 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 3.

Table 3 – Angled Load Rating

Hang Fast	Maximum Load an at angle from vertical				
	0°	15°	30°	45°	60°
XP1	33 lbs	32 lbs	29 lbs	23 lbs	17 lbs
HF1	22 lbs	21 lbs	19 lbs	16 lbs	11 lbs
HF2 / XP2	100 lbs	97 lbs	87 lbs	71 lbs	50 lbs
HF3	200 lbs	193 lbs	173 lbs	141 lbs	100 lbs
HF4	496 lbs	479 lbs	430 lbs	351 lbs	248 lbs
HF5	716 lbs	692 lbs	620 lbs	506 lbs	358 lbs

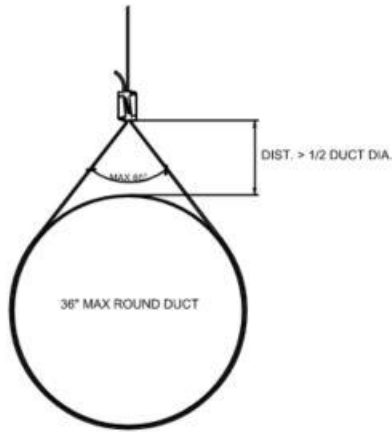
Table 4 – End Fixings

End Fixing	End Fixing Code	Hanger Size
Loop	LG	#1, #2, #3, #4, #5
1/4" - 1" long thread stud	SQG	#1, #2, #3
1/4" - 1" long Stainless-Steel thread stud	SQS	#2, #3
1/4" - 2" long thread stud	SQ2G	#2, #3
3/8" - 1.75" long thread stud	S3/8G	#3, #4
3/8" - 1.875" long thread stud	S345G	#2
3/4" - 7.15" long thread stud	S345G	#6
3/8" Extended stud	S385G	#2, #3, #4
1/2" Extended stud	S125G	#2, #3, #4
1/4" Toggle / Loop Toggle	TQG	#1, #2
5/16" Toggle / Loop Toggle	TG	#2
3/8" Toggle / Loop Toggle	TG	#3
eyelet	EYQG	#1, #2, #3
90 deg eyelet (1/4" anchor)	EY90QG	#1, #2, #3
90 deg eyelet (3/8" anchor)	EY903/8QG	#2, #3
mini hook	MHG	#1
hook	HG	#1, #2, #3
SS hook	HS	#2
C-clip for 1/8" cable strut	CC-1/8	#2
C-clip for 1/4" cable strut	CC-1/4	#2
End Stop with washer	EG14W	#2
Barrel 1/4"	BQG	#1, #2
Barrel 3/8"	B3/8G	#2, #3

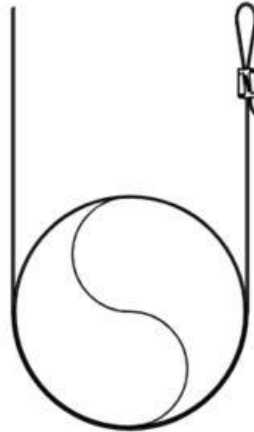
*Hanger size mentioned is applicable to all the hanger models falling under that specific size. For example, a #2 hook can be used with all the hangers from Table 1 with number 2 in their product code e.g. DT2, BT2, XP2, HF2, UG2, YHF2 etc.

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. Gripple's Hangers for Pipe, Duct and Conduit Support shall be installed in accordance with manufacturer's published installation instructions and applicable codes.
5. Gripple's Hangers for Pipe, Duct and Conduit Support are manufactured under a quality control system with annual surveillance inspection with ICC-ES.



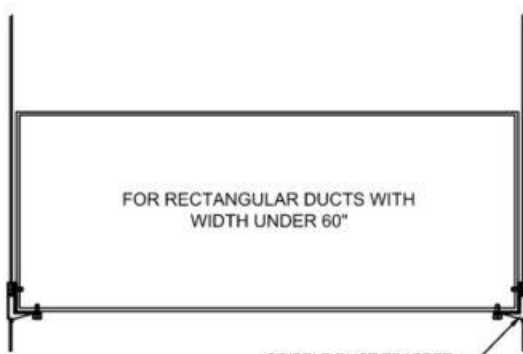
TEARDROP INSTALLATION WITH GRIPPLE HF OR XP



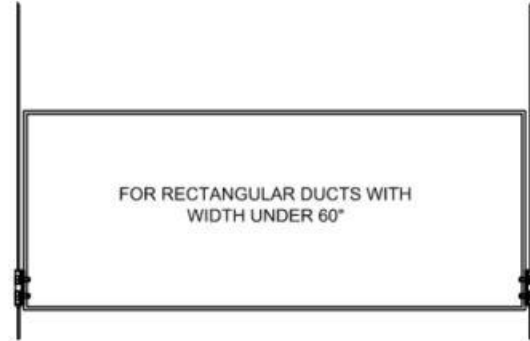
CRADLE INSTALLATION WITH GRIPPLE HF OR XP



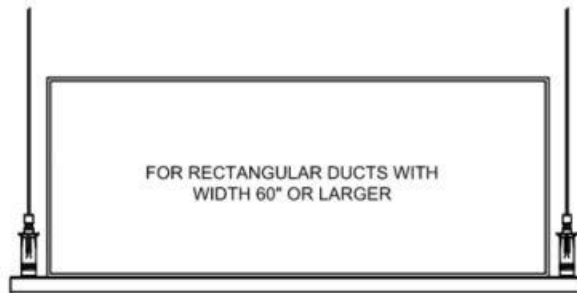
CRADLE INSTALLATION WITH GRIPPLE UG



RECTANGULAR DUCT INSTALLATION WITH GRIPPLE DT2



RECTANGULAR DUCT INSTALLATION WITH GRIPPLE BT2



RECTANGULAR DUCT INSTALLATION WITH GRIPPLE UG

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

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



TYPICAL PIPE AND CONDUIT INSTALLATION DETAILS

Note:

1. Details shown are compliant with ANSI/MSS SP-58, IAPMO PS-95 and UL 2239. 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. Gripple products shown on the detail are typical examples and other Gripple products listed in this listing reports can be used for similar installations following manufacturer's installation instructions