

RILCO

(713) • 466 • 4777
www.rilco.com

CRYOGEL & PYROGEL I

12700 Tanner Rd.
Houston, Texas 77041

PRODUCT GUIDE

PRE-INSULATED COLD TEMPERATURE PIPE SUPPORTS

- Traditional Polyurethane Pipe Supports
- FOAMGLAS® Pipe Supports
- Isolation Blocks & Additional Components
- Insul-Guides



PRE-INSULATED HOT TEMPERATURE PIPE SUPPORTS

- Calcium Silicate / Chilled Water Pipe Supports
- FOAMGLAS® Pipe Supports
- Perlite Pipe Supports
- Mineral Wool Pipe Supports



ASPEN AEROGELS INC. HOT & COLD INSULATED PIPE SUPPORTS

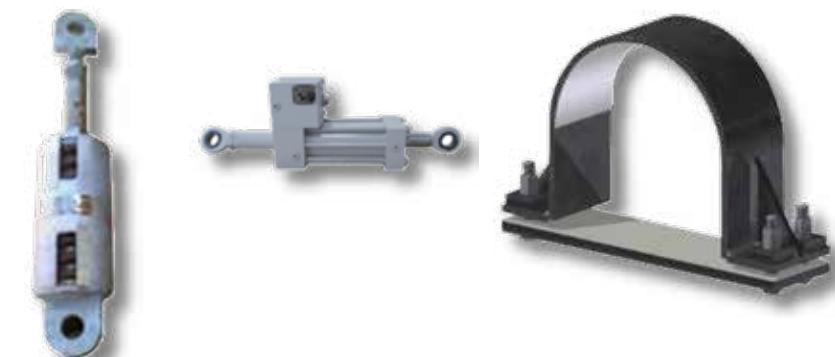
- Cryogel™ Insulated Pipe Supports
- Pyrogel™ XT Insulated Pipe Supports

Cryogel Z, Pyrogel XP, and Aerogel are all trademarks of Aspen Aerogel, Inc.



STRUCTURAL FABRICATION

- Clevis Hangers
- Structural Supports
- Hold Downs
- Instrument Stands
- Beam Attachments
- Un-Insulated Pipe Shoes
- Pipe Stands
- Embeds



ENGINEERED PIPE SUPPORTS

- RILCO Roller Cam Constants
- Variable Spring Supports & Hangers
- Constant Spring Supports & Hangers
- Big Ton Springs



VIBRATION CONTROL / HYDRAULIC

- Sway Strut Assembly
- Sway Brace
- Hydraulic Snubbers



FIELD SERVICES

Rilco Manufacturing Now Offering Field Services

Rilco provides top of the line field services to our customers around the world. With extensive experience in evaluating pipe support applications and installations, you can rest assured that your pipe supports will be properly installed and thoroughly inspected by our team.

If you have a planned shutdown that will require additional assistance with pipe support installation/maintenance, or if you need a repair or replacement service performed, please do not hesitate to contact us for your field service needs. Rilco Manufacturing provides high quality pipe support solutions that are guaranteed to perform.

We also offer training on installation and maintenance of pipe supports if you would like us to travel to your job site to teach your team.

Please e-mail us at info@rilco.com

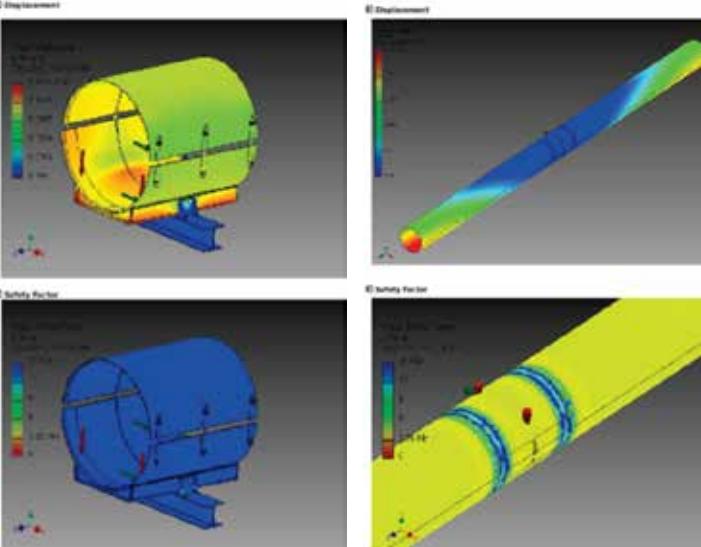
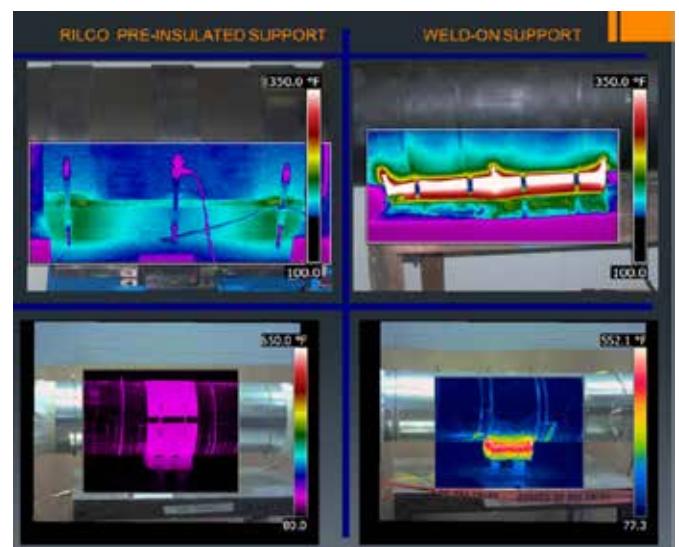
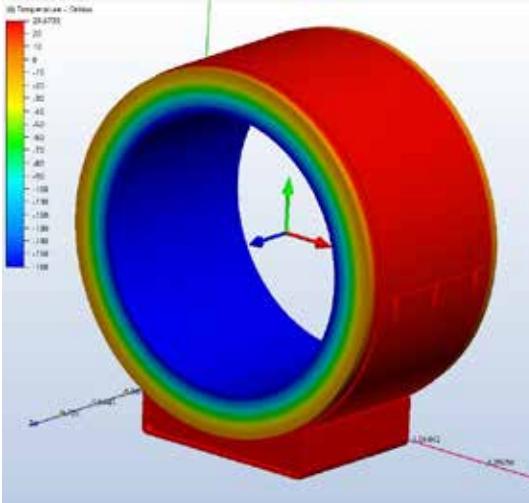
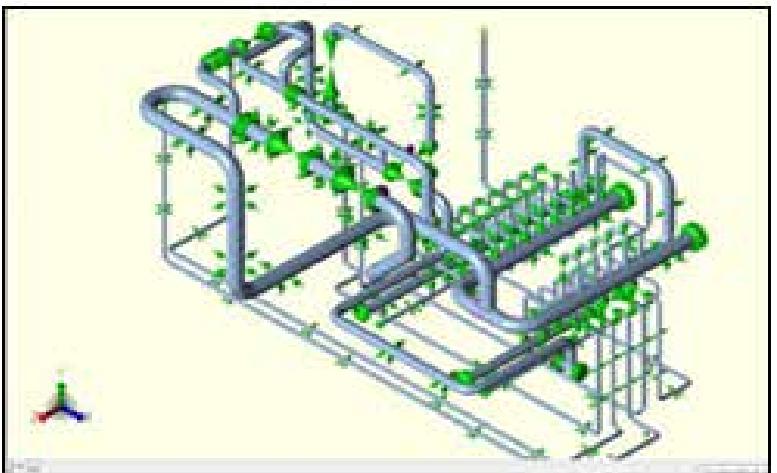


Complimentary On-Site Installation Demo with Order!!!

ENGINEERING SERVICES

Our engineering department is staffed with experienced professionals who have over 100 years combined experience in the design of pipe supports. The department will ensure that the business goals of our clients are met in a safe, timely, and cost-effective manner. These professionals are capable of working with any type of pipe support client whether it's a grassroots construction project or a revamp and upgrade project.

- Engineering Support
- Research & Design
- Finite Element Analysis
- HAZOP/HAZID/SIL
- Surge Analysis
- Pipe Stress Analysis
- CFD Analysis
- Process Design Audits
- Feasibility Report Prep
- Sizing Calculations
- Static Stress Analysis
- Dynamic Stress Analysis
- 3D Modeling of Pipe Supports
- Analysys of Steam Lines
- Support Troubleshooting



RESEARCH & DEVELOPMENT

With innovation as one of our top priorities we employ a research and development team that keeps Rilco at the forefront of pipe support technology. Our in-house testing equipment has allows us to continuously experiment with new materials and technologies and enables our R&D team to vet out each product from idea conceptualization to production.

- Physical Load Testing
- Low Temperature Testing of Polyurethane & Cryogel® Z Insulated Pipe Supports
- High Temperature Testing of Calcium Silicate & Pyrogel® XT-E Insulated Pipe Supports
- Low Temperature Coil Spring Cyclic Testing
- Belleville Washer Fatigue Testing



ABOUT RILCO



Rilco Manufacturing Company is a world leader in the development of pipe support systems and components. Our company began as a small pipe insulation facility in 1972 and has experienced exponential growth due to the high quality of our products, consistency of on-time deliveries, and the innovative designs of our engineering department.

We pride ourselves on the fact that our manufacturing processes begin in the shop with raw materials and remain in our production facilities all the way to the finished product. This process allows us to customize virtually all of our products to fit your project needs.

OUR MISSION

Exceed Customer Expectations.

Meaning, we will continuously look to improve our processes and strive to be regarded as the most dependable international designer and manufacturer of the highest quality pipe support systems and consistently maintain on-time deliveries for all of our client's projects.

Call us to request your quote!!!

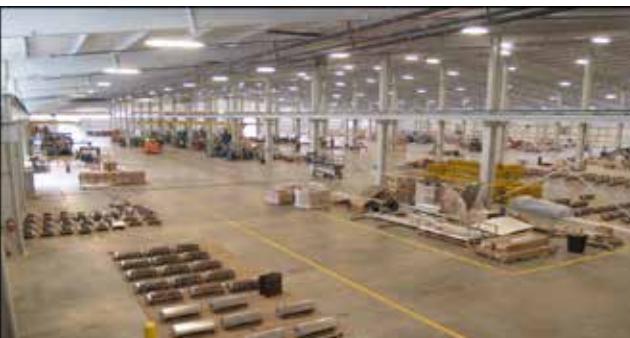
STANDARDS & SPECIFICATIONS

QUALITY SYSTEMS

- ISO 9001:2015

DESIGN & MANUFACTURING

• AISC	Steel Construction Manual
• API 5L	Specification for Line Pipe
• ASME B31.1	Power Piping
• ASME B31.3	Process Piping
• ASME Sec IX	Welding, Brazing and Fusing Qualifications
• ASTM A123-2015	Standard Specialization for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
• ASTM A153-2016	Standard Specialization for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
• ASTM A700-2014	Standard Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment
• ASTM B633-2013	Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel
• ASTM B695-2000	Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
• ASTM C165-1991	Standard Test Method for Measuring Compressive Properties of Thermal Insulation
• ASTM C303-1990	Standard Test Method for Dimensions and Density of Preformed Block and Board-Type Thermal Insulation
• ASTM E337-2007	Standard Test Method for Measuring Humidity with a Psychrometer
• AWS D1.1-2015	Structural Welding Code - Steel
• AWS D1.6-2015	Structural Welding Code - Stainless Steel
• CWB CSA W47.1	Certification of Companies for Fusion Welding of Steel
• CWB CSA W59	Welded Steel Construction (Metal Arc Welding)
• ISPM 15-2009	International Plant Protection Convention (IPPC)-International Standards for Phytosanitary Measures (ISPM)
• MSS SP-58-2009	Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application and Installation
• SSPC-SP COM 2009	Surface Preparation Commentary for Steel and Concrete Substrates
• JIS H 8641-2007	Hot Dip Galvanized Coatings



DISCLAIMER

ALL products included in this catalog are intended for installation and service only as described or specified herein.

RILCO cannot be held responsible for injuries to persons or property damage caused by misapplication or improper use of any products in its catalogs used in ways or for purposes other than for which said products have been designed and manufactured. Some examples of misuse are: use of hanger products as erection tools; use of beam clamps on beams for which they were not specified; use of concrete inserts as anchors for pulling pipe to proper elevation and suspension of one clevis hanger under another, resulting in a cumulative load greater than the specified support capability.

RILCO products are carefully designed and manufactured in accordance with the approvals and/or codes referenced above. Care should be exercised by installers and end users to install, use and maintain these products properly to avoid any possible on-the-job accidents.

All designed products are subject to change without notice.

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PRODUCT OVERVIEW

CryoWrap™ & PyroWrap™ the Newest Technology in Insulated Pipe Supports

Once again RILCO Manufacturing Company Incorporated leads the way with lighter weight, insulated pipe supports featuring the lowest K-Values of any industrial insulation available. Designed for applications from -460°F (-270°C) to 1200°F (650 °C) we have the exact Anchor, Guide or Resting Support to meet your design requirements.

RILCO teamed with Aspen Aerogels Inc. to offer a pipe support that utilizes leading edge technology to provide an environmentally friendly, hydrophobic insulation that is not only durable but lightweight and small in diameter.

CryoWrap™ and PyroWrap™ use aerogels, which are recognized as the world's lowest density solid and most effective thermal insulator. These lightweight silica solids, derived from gel with gas replacing the liquid, are poor conductors because they are comprised of tiny, three dimensional, intertwined clusters accounting for only 3% of the volume. The remaining 97% consists of nanopores of air with minimal room to move, thereby inhibiting convection and gas-phase conduction.

CryoWrap™ and PyroWrap™ pipe supports combine RILCO's renowned engineering and proprietary support design expertise with Aspen Aerogel's Cryogel™ Z and Pyrogel™ XT. The result is a pipe support yielding a resilient and durable design with superior insulating properties designed specifically for applications ranging from cryogenic to high temperature.

Cryogel Z, Pyrogel XT and Aerogel are all registered trademarks of Aspen Aerogel INC.

Distinguishing Characteristics

Fire Resistant - CryoWrap™ and PyroWrap™ offer unparalleled resistance to flame spread with minimal smoke emissions and no toxic byproducts. Each product offers extended protection for piping and equipment, thereby extending the necessary response time to unforeseen events.

Hydrophobic - CryoWrap™ and PyroWrap™ give the pipe support incredible resistance to moisture.

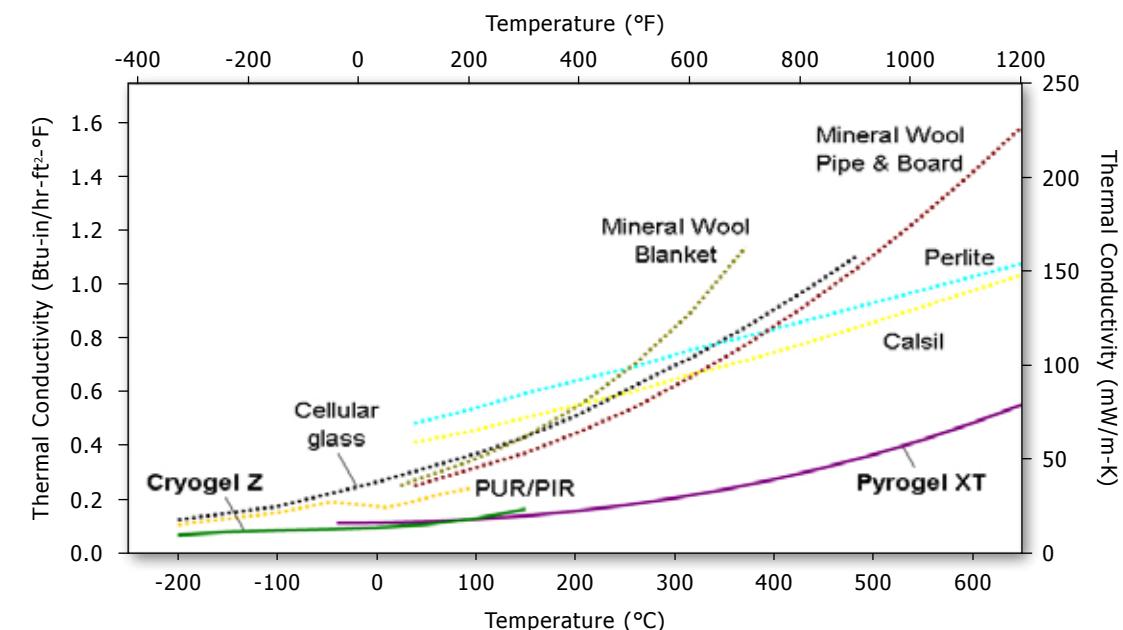
Light Weight - CryoWrap™ and PyroWrap™ lighter weight allows reduced overall loading of pipe and equipment support systems.

Reduced space requirements- CryoWrap™ and PyroWrap™, with their superior insulation qualities, deliver a reduced insulation cross-section allowing additional equipment per given area.

System integrity- CryoWrap™ does not allow thermal leaks or moisture intrusion due to its factory applied zero-perm vapor barrier.

Durable - Unlike pipe supports utilizing rigid insulation that is prone to cracking from mechanical damage, CryoWrap™ and PyroWrap™ are capable of withstanding high impact loading without compromising performance or showing damage.

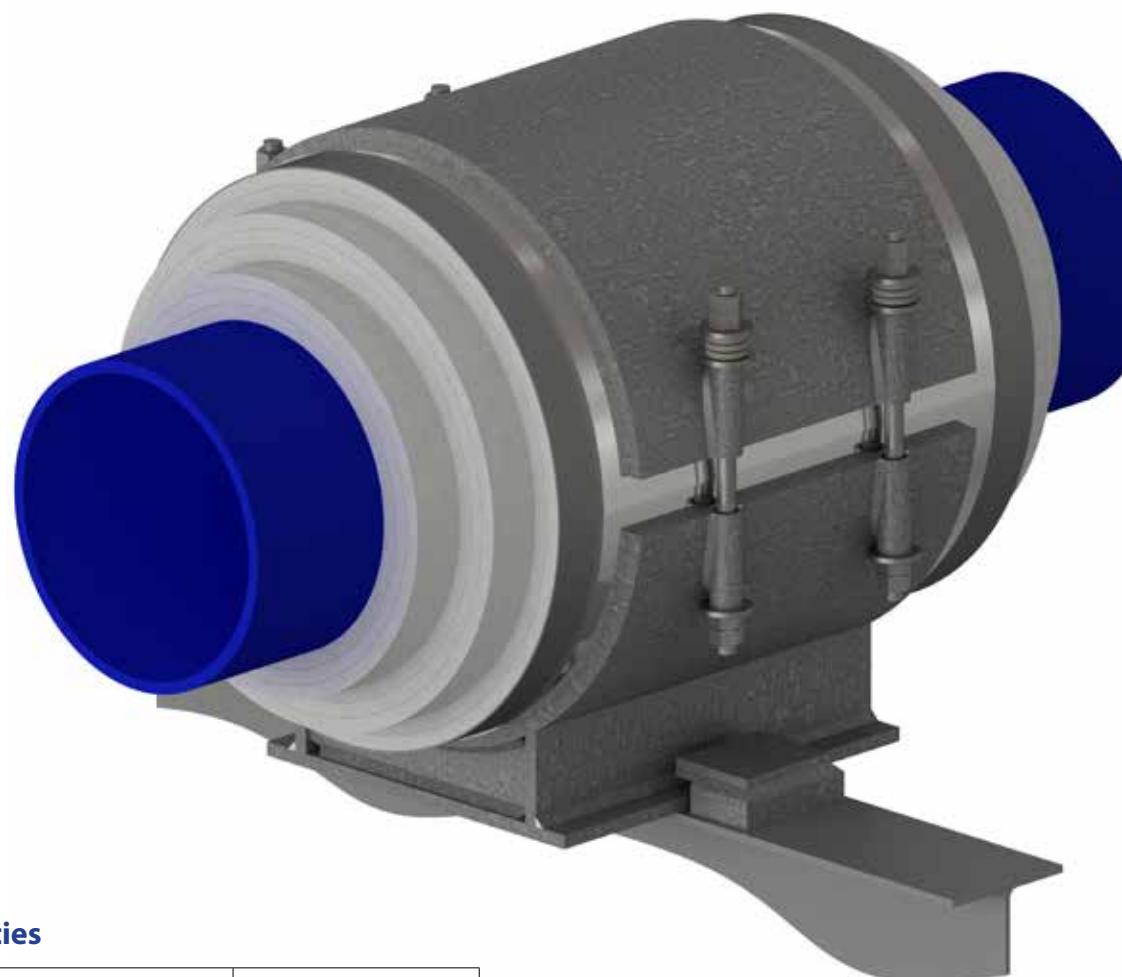
Environmentally Friendly – CryoWrap™ and PyroWrap™ are capable of adherence to any environmental regulations. Since these insulating aerogels are essentially silica (sand), require no blowing agents, and contain no respirable fibers, CFC, or HCFC, they pose no chemical threat to the environment. Both products can be produced in longer lengths than traditional insulation thereby greatly improving installation times and allowing for easier, safer handling on the job site.



CryoWrap

RILCO CryoWrap™ for Cryogenic and Sub-Ambient Applications

Service Temperature Ranges: -460°F (-270°C) to 195°F (90°C)



Physical Properties

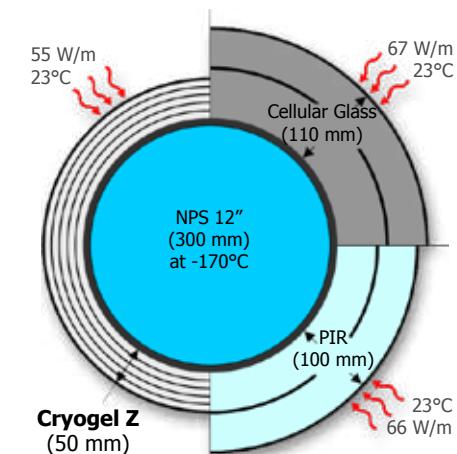
Thicknesses*	0.20 in (5 mm)	0.40 in (10 mm)
Material Form*	57 in (1,450 mm) wide x 211 ft (64 m) long rolls	57 in (1,450 mm) wide x 126 ft (38 m) long rolls
Max. Use Temp.	195°F (90°C)	
Color	White	
Density*	8.0 lb/ft³ (0.13 g/cc)	
Hydrophobic	Yes	

*Nominal Values



CryoWrap™ pipe supports provide unique properties which makes them the ultimate in thermal protection for cryogenic requirements. The extremely low thermal conductivity reduces heat gain and liquid "boil-off" with no water access or egress. While its superior resistance to mechanical abuse attests to the product's durability, the smaller circumference eases installation and reduces labor costs.

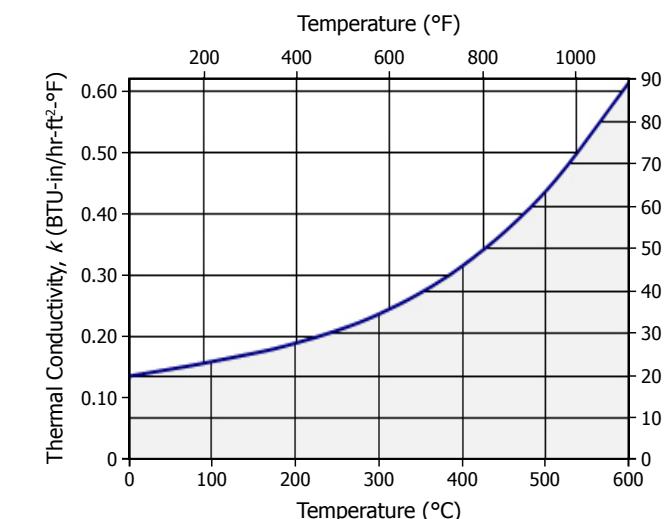
CryoWrap™ pipe supports utilize Aspen Aerogel's Cryo-gel™ Z with an integral vapor barrier and are specifically engineered with 50%-75% less thickness, lighter weight and no water permeability.



All three designs meet the same condensation control criteria

Thermal Conductivity†

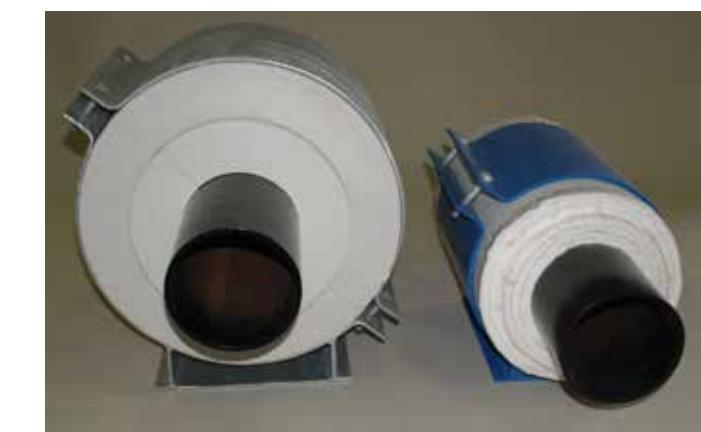
ASTM C 177 Results



Mean Temp. °C	0	100	200	300	400	500	600
°F	32	212	392	572	752	932	1112
k mW/m-K	20	23	28	35	46	64	89
BTU-in/hr-ft²-°F	0.14	0.16	0.19	0.24	0.32	0.44	0.62

*Thermal conductivity measurements taken at a compressive load of 2 psi.

Comparable Insulation Ratings



Polyurethane

CryoWrap™

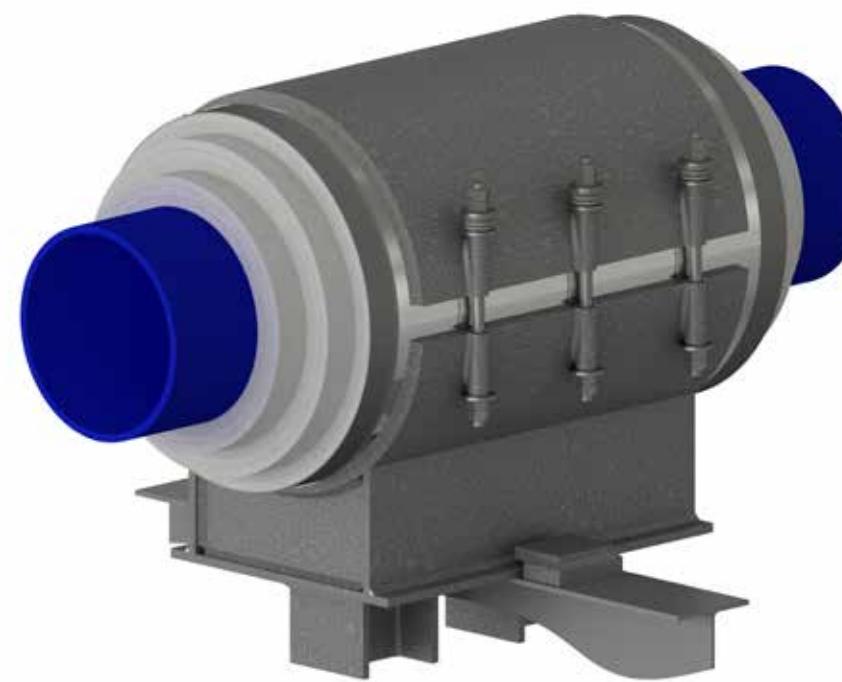
RILCO CryoWrap™ - Properties**Service Temperature Ranges: -460°F (-270°C) to 195°F (90°C)**

Thermal Performance: CryoWrap™ pipe supports have the lowest thermal conductivity of any support available for cryogenic or sub-ambient applications. They are much smaller in circumference than other supports, allowing for a smaller surface area and therefore reduced heat gain. In most instances condensation control thickness is sufficient to meet the desired heat gain limits. This heat gain "safety factor" maximizes system performance by improving process control, reducing boil-off and saving energy. The thermal performance remains constant since there are no blowing agents to diffuse.

Moisture and Vapor Resistance: CryoWrap™ pipe supports with their integral vapor barrier, provides the only zero-perm system available for cryogenic applications.

Structural Integrity: CryoWrap™ pipe supports are the optimal choice for sub-ambient and cryogenic applications because they remain flexible and experience no thermal shock. Therefore the usual issues of degraded insulation caused by contraction, extreme stress, structural damage and the typical freeze-thaw crack propagation problems encountered with the standard insulation mediums are no longer a concern.

Dimensional Stability: CryoWrap™ pipe supports allow minimal movement of the insulated system because of a low thermal expansion coefficient. The flexibility and low contraction rate eliminates the need for labor intensive and more costly expansion/contraction joints required by other products.



Anchored Support Shown



Resting Support



High Lateral Travel Support



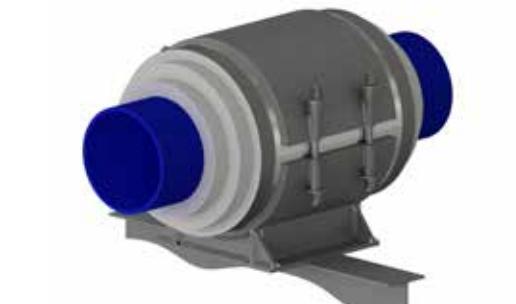
Vertically Restrained Guided Support



Anchored Support



Guided Support



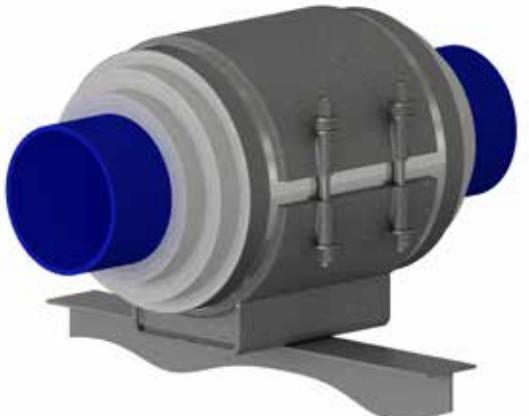
Hanging Support

Applications & Features:

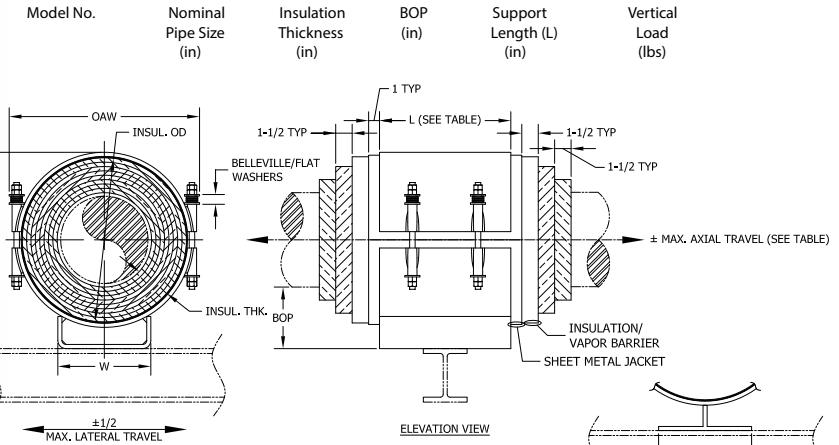
- Temperature range to -460 Deg F to 195 Deg F
- Higher temperature applications available
- Teflon®/2B SS 304 slide plates on shoe and supporting steel on sizes 26" and larger
- Design loads based on a safety factor of 5
- A36 steel construction
- See technical specification RCS-750
- Test results available upon request
- Steel finish available in galvanized finish or painted
- Increased loading capability available. Contact Rilco for additional information
- Support constructed in accordance with ASME B31.1, B31.3 and MSS-SP58
- A307 or A193 B7 plated bolts/studs
- Patented anchor system allows increased load carrying and decreased heat transfer (Anchored Support)

For special applications or for information on other insulation thicknesses or pipe sizes, please contact us!

CryoWrap Resting Support



DESIGNATION EXAMPLE

CSCW - 8 x 30 - 4 - 12 - 5100

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

NOTES:

- 1) Slide plates required for 26" NPS & up.
- 2) All dimensions in inches unless noted.

*W - Dimension is calculated by multiplying
(INSULATION OD*0.55), when base is not a WT
member.

L (in)*	Max. Axial Travel (in)	
	Centered	Offset
6	1.5	3
12	4.5	9

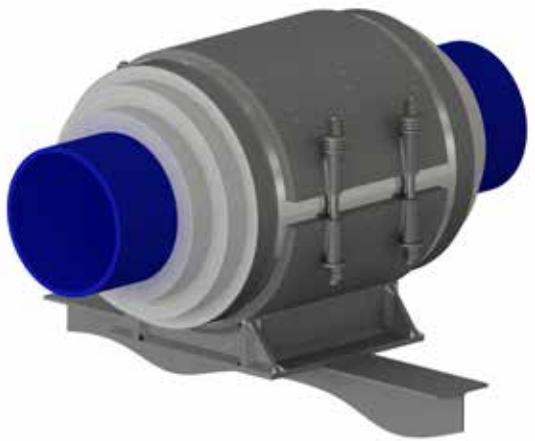
* L + 6" for pipe sizes > 42"

Sizing Chart Cont'd

PIPE SIZE	VERT. LOAD (lbs)	INSULATION THICKNESS																			
		60mm				70mm				80mm				90mm							
		BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)				
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																					
1/2"	350	4	5.6	7.5	7.5	6	6.4	8.5	10	6	7.2	9	10.5	6	8	10	11	6	8.8	10.5	11.5
3/4"	450	4	5.8	7.5	8	6	6.6	8.5	10.5	6	7.4	9.5	10.5	6	8.2	10	11	6	9	11	11.5
1"	600	4	6.1	8	8	6	6.9	9	10.5	6	7.7	9.5	11	6	8.5	10.5	11.5	6	9.2	11	11.5
1-1/2"	870	4	6.7	8.5	8.5	6	7.5	9.5	11	6	8.2	10	11.5	6	9	11	12	6	9.8	11.5	12.5
2"	1090	4	7.1	9	9	6	7.9	10	11.5	6	8.7	10.5	12	6	9.5	11.5	12.5	6	10.3	12	13
2-1/2"	1310	4	7.6	9.5	9.5	6	8.4	10.5	12	6	9.2	11	12.5	6	10	12	13	6	10.8	12.5	13.5
3"	1600	4	8.3	10	10.5	6	9.1	11	12.5	6	9.8	11.5	13	6	10.6	12.5	13.5	6	11.4	13.5	14
4"	2500	4	9.3	11	11.5	6	10.1	12	13.5	6	10.8	12.5	14	6	11.6	13.5	14.5	6	12.4	14.5	15
6"	3800	4	11.4	14	13.5	6	12.2	14.5	16	6	13	15.5	16.5	6	13.8	16	16.5	6	14.5	17	17
8"	5100	6	13.4	16	17.5	6	14.2	16.5	18	6	15	17.5	18.5	6	15.8	18	18.5	8	16.5	19	21
10"	6000	6	15.5	18	19.5	6	16.3	18.5	20	6	17.1	19.5	20.5	6	17.9	20.5	21	8	18.7	21	23
12"	6600	6	17.5	20	21.5	6	18.3	20.5	22	6	19.1	21.5	22.5	6	19.9	22.5	23	8	20.7	23	25
14"	7500	6	18.8	21	23	6	19.6	22	23.5	6	20.3	22.5	23.5	6	21.1	23.5	24	8	21.9	24.5	26.5
16"	8700	6	20.8	23	25	6	21.6	24	25.5	6	22.3	24.5	26	8	23.1	25.5	28	8	23.9	26.5	28.5
18"	9600	6	22.8	25.5	27	6	23.6	26.5	27.5	6	24.3	27	28	8	25.1	28	30	8	25.9	29	30.5
20"	10200	6	24.8	27.5	29	6	25.6	28.5	29.5	6	26.3	29	30	8	27.1	30	32	8	27.9	31	32.5
24"	10800	6	28.8	31.5	33	6	29.6	32.5	33.5	6	30.3	33	34	8	31.1	34	36.5	8	31.9	35	36.5
30"	14100	6	34.8	37.5	39	6	35.6	38.5	39.5	8	36.3	39	42	8	37.1	40	42.5	8	37.9	41	42.5
36"	20420	6	40.8	43.5	45	6	41.6	44.5	45.5	8	42.3	45	48	8	43.1	46	48.5	8	43.9	47	48.5
42"	31000	6	46.8	50	51	6	47.6	51	51.5	8	48.3	51.5	54	8	49.1	52.5	54.5	8	49.9	53	54.5
48"	34600	6	52.8	56	57	6	53.6	57	57.5	8	54.3	57.5	60	8	55.1	58.5	60.5	8	55.9	59	60.5
56"	40400	6	60.8	64	65	6	61.6	65	65.5	8	62.3	65.5	68	8	63.1	66.5	68.5	8	63.9	67	68.5
60"	43300	6	64.8	68	69	6	65.6	69	69.5	8	66.3	69.5	72	8	67.1	70.5	72.5	8	67.9	71	72.5
66"	47600	6	70.8	74	74	6	71.6	75	74.5	8	72.3	75.5	77	8	73.1	76.5	77.5	8	73.9	77	77.5
72"	52000	6	76.8	80	81	6	77.6	81	81.5	8	78.3	81.5	84	8	79.1	82.5	84.5	8	79.9	83	84.5

PIPE SIZE	VERT. LOAD (lbs)	INSULATION THICKNESS															
		10mm															

CryoWrap High Lateral Travel Support



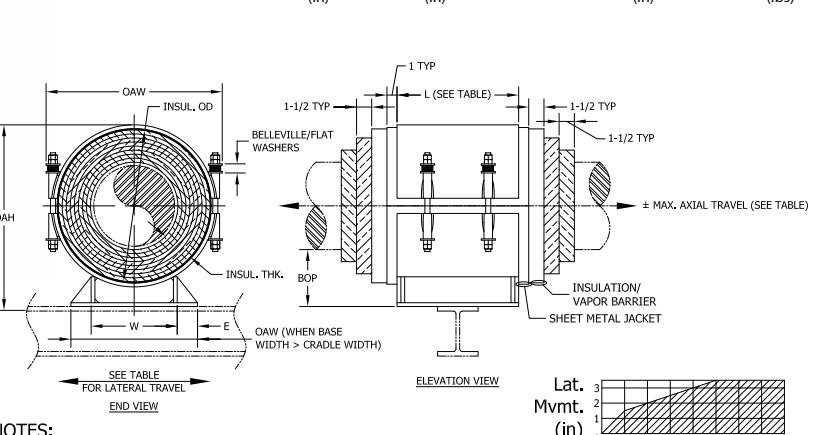
DESIGNATION EXAMPLE

CS(H)CW - 8 x 30 - 4 - 12 - 5100

Model No.

Nominal Pipe Size (in) Insulation Thickness (in) BOP (in) Support Length (L) (in)

Vertical Load (lbs)

**Ordering Instructions:**

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

* L + 6" for pipe sizes > 42"

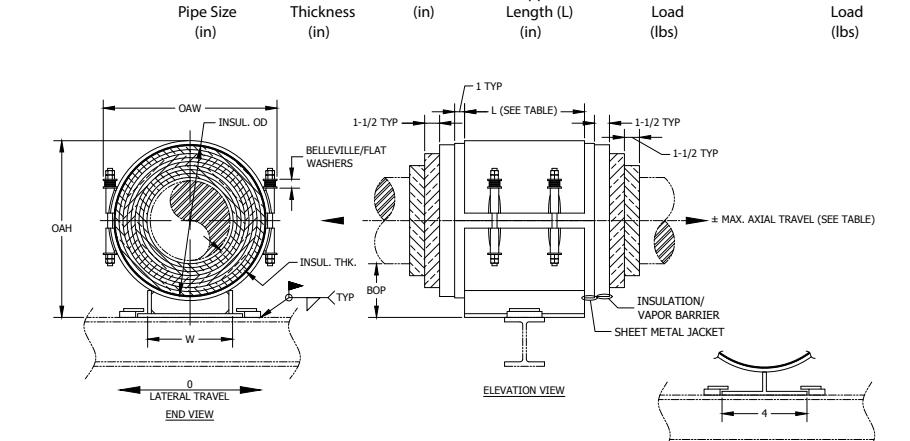
PIPE SIZE	VERT. LOAD (lbs)	INSULATION THICKNESS																			
		10mm				20mm				30mm				40mm				50mm			
BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)		
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																					
1/2"	350	4	1.7	5.5	5.5	4	2.5	7.5	6	4	3.3	8.5	6.5	4	4	9.5	7	4	4.8	10.5	7.5
3/4"	450	4	1.9	5.5	6	4	2.7	7.5	6.5	4	3.5	8.5	6.5	4	4.2	9.5	7	4	5	10.5	7.5
1"	600	4	2.2	5.5	6	4	2.9	7.5	6.5	4	3.7	8.5	7	4	4.5	9.5	7.5	4	5.3	10.5	7.5
1-1/2"	870	4	2.7	5.5	0	4	3.5	7.5	0	4	4.3	8.5	7.5	4	5.1	9.5	8	4	5.9	10.5	8.5
2"	1090	4	3.2	5.5	0	4	4	7.5	7.5	4	4.8	8.5	8	4	5.6	9.5	8.5	4	6.4	10.5	9
2-1/2"	1310	4	3.7	5.5	0	4	4.5	7.5	8	4	5.3	8.5	8.5	4	6.1	9.5	9	4	6.9	10.5	9.5
3"	1600	4	4.3	6	8.5	4	5.1	7.5	8.5	4	5.9	8.5	9	4	6.7	9.5	9.5	4	7.5	10.5	10
4"	2500	4	5.3	7	9.5	4	6.1	8	9.5	4	6.9	9	10	4	7.7	9.5	10.5	4	8.5	10.5	11
6"	3800	4	7.5	10	11.5	4	8.2	10.5	12	4	9	11.5	12.5	4	9.8	12	12.5	4	10.6	13	13
8"	5100	4	9.5	12	13.5	4	10.2	12.5	14	4	11	13.5	14.5	4	11.8	14	14.5	4	12.6	15	15
10"	6000	4	11.6	14	15.5	4	12.4	15	16	4	13.2	15.5	16.5	4	13.9	16.5	17	4	14.7	17	17
12"	6600	4	13.6	16	17.5	4	14.4	17	18	4	15.2	17.5	18.5	4	15.9	18.5	19	4	16.7	19	19
14"	7500	4	14.8	17	19	4	15.6	18	19.5	4	16.4	19	19.5	4	17.2	19.5	20	4	18	20.5	20.5
16"	8700	4	16.8	19	21	4	17.6	20	21.5	4	18.4	21	22	4	19.2	21.5	22	6	20	22.5	24.5
18"	9600	4	18.8	21.5	23	4	19.6	22.5	23.5	4	20.4	23.5	24	4	21.2	24	24	6	22	25	26.5
20"	10200	4	20.8	23.5	25	4	21.6	24.5	25.5	4	22.4	25.5	26	4	23.2	26	26	6	24	27	28.5
24"	10800	4	24.8	27.5	29	4	25.6	28.5	29.5	4	26.4	29.5	30	4	27.2	30	30.5	6	28	31	32.5
30"	14100	4	30.8	33.5	35	4	31.6	34.5	35.5	4	32.4	35.5	36	6	33.2	36	38.5	6	34	37	38.5
36"	20420	4	36.8	39.5	41	4	37.6	40.5	41.5	4	38.4	41.5	42	6	39.2	42	44.5	6	40	43	44.5
42"	31000	4	42.8	46	47	4	43.6	47	47.5	4	44.4	47.5	48	6	45.2	48.5	50.5	6	46	49	50.5
48"	34600	4	48.8	52	53	4	49.6	53	53.5	4	50.4	53.5	54	6	51.2	54.5	56.5	6	52	55	56.5
56"	40400	4	56.8	60	61	4	57.6	61	61.5	4	58.4	61.5	62	6	59.2	62.5	64.5	6	60	63	64.5
60"	43300	4	60.8	64	65	4	61.6	65	65.5	4	62.4	65.5	66	6	63.2	66.5	68.5	6	64	67	68.5
66"	47600	4	66.8	70	70	4	67.6	71	70.5	4	68.4	71.5	71	6	69.2	72.5	73.5	6	70	73	73.5
72"	52000	4	72.8	76	77	4	73.6	77	77.5	4	74.4	77.5	78	6	75.2	78.5	80.5	6	76	79	80.5

PIPE SIZE	VERT. LOAD (lbs)	INSULATION THICKNESS																			
		60mm				70mm				80mm				90mm				100mm			
		BOP (in)</																			

CryoWrap Vertically Restrained Guided Support

DESIGNATION
EXAMPLE**CGCW - 8 x 30 - 4 - 12 - 4335 - 1520**

Model No.

Nominal
Pipe Size
(in)Insulation
Thickness
(in)BOP
(in)Support
Length (L)
(in)Vertical
Load
(lbs)Lateral
Load
(lbs)

L (in)*	Max. Axial Travel (in)	
	Centered	Offset
6	1.5	3
12	4.5	9

* L + 6" for pipe sizes > 42"

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Movements

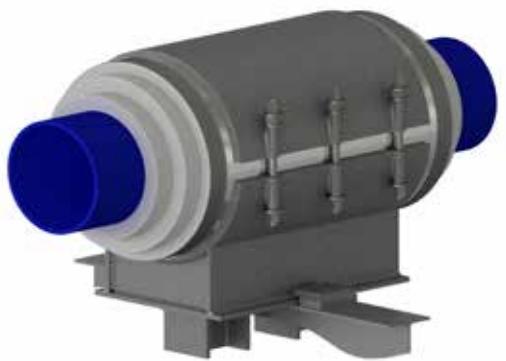
* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

PIPE SIZE	VERT. LOAD (lbs)	LAT. LOAD (lbs)	INSULATION THICKNESS																				
			10mm				20mm				30mm				40mm				50mm				
			BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)					
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																							
1/2"	300	105	4	1.7	6	5.5	4	2.5	6	6	4	3.3	6	6.5	4	4	6	7	4	4.8	6.5	7.5	
3/4"	385	135	4	1.9	6	6	4	2.7	6	6.5	4	3.5	6	6.5	4	4	5	7	4	4.2	6	7.5	
1"	510	180	4	2.2	6	6	4	2.9	6	6.5	4	3.7	6	7.5	4	4	4.5	6.5	4	5.3	7	7.5	
1-1/2"	740	260	4	2.7	6	6.5	4	3.5	6	7	4	4.3	6	7.5	4	4	4.3	6	7	4	5.9	8	8.5
2"	930	330	4	3.2	6	7	4	4	6	7.5	4	4.8	6.5	8	4	4	4.8	6.5	8	4	5.6	7.5	9
2-1/2"	1115	395	4	3.7	6	7.5	4	4.5	6.5	8	4	5.3	7	8.5	4	4	5.3	7	8	4	6.4	8.5	9.5
3"	1360	480	4	4.3	6	8.5	4	5.1	7	8.5	4	5.9	8	9	4	4	5.9	8	9	4	6.7	8.5	10
4"	2125	745	4	5.3	7.5	9.5	4	6.1	8	9.5	4	6.9	10.5	10.5	4	4	6.9	10.5	11	4	7.5	9.5	11
6"	3230	1135	4	7.5	10	11.5	4	8.2	10.5	12	4	9	11.5	12.5	4	4	9.8	12	12.5	4	10.6	13	13
8"	4335	1520	4	9.5	12	13.5	4	10.2	12.5	14	4	11	13.5	14.5	4	4	12.6	15	15	4	12.9	15	17.5
10"	5100	1785	4	11.6	14	15.5	4	12.4	15	16	4	13.2	15.5	16.5	4	4	14.7	17	17	4	12.7	14.5	17
12"	5610	1965	4	13.6	16	17.5	4	14.4	17	18	4	15.2	17.5	18.5	4	4	16.7	19	19	4	13.2	15	17.5
14"	6375	2235	4	14.8	17	19	4	15.6	18	19.5	4	16.4	19	19.5	4	4	17.2	20.5	20.5	4	13.8	15.5	18.5
16"	7395	2590	4	16.8	19	21	4	17.6	20	21.5	4	18.4	21	22	4	4	19.2	22.5	22.5	4	14.2	16	18.5
18"	8160	2860	4	18.8	21.5	23	4	19.6	22.5	23.5	4	20.4	23.5	24	4	4	21.2	24.5	24.5	4	15.2	17	20.5
20"	8670	3035	4	20.8	23.5	25	4	21.6	24.5	25.5	4	22.4	25.5	26	4	4	22.6	25.5	25	4	16.2	18	20.5
24"	9180	3215	4	24.8	27.5	29	4	25.6	28.5	29.5	4	26.4	29.5	30	4	4	27.2	30	30	4	17.2	19.5	22.5
30"	11985	4195	4	30.8	33.5	35	4	31.6	34.5	35.5	4	32.4	35.5	36	4	4	33.2	36	36	4	18.2	20.5	23.5
36"	17360	6080	4	36.8	39.5	41	4	37.6	40.5	41.5	4	38.4	41.5	42	4	4	39.2	42	42	4	21.2	23.5	26.5
42"	26350	9225	4	42.8	46	47	4	43.6	47	47.5	4	44.4	47.5	48	6	4	45.2	48.5	48.5	6	22.2	24.5	27.5
48"	29410	10295	4	48.8	52	53	4	49.6	53	53.5	4	50.4	53.5	54	6	51.2	54.5	56.5	6	23.2	25.5	28.5	
56"	34340	12020	4	56.8	60	61	4	57.6	61	61.5	4	58.4	61.5	62	6	59.2	62.5	64.5	6	24.2	26.5	29.5	
60"	36805	12885	4	60.8	64	65	4	61.6	65	65.5	4	62.4	65.5	66	6	63.2	66.5	68.5	6	25.2	27.5	30.5	
66"	40460	14165	4	66.8	70	70	4	67.6	71	70.5	4	68.4	71.5	71	6	69.2	72.5	73.5	6	26.2	28.5	31.5	
72"	44200	15470	4	72.8	76	77	4	73.6	77	77.5	4	74.4	77.5	78	6	75.2	78.5	80.5	6	27.2	29.5	32.5	

PIPE SIZE	VERT. LOAD (lbs)	LAT. LOAD (lbs)	INSULATION THICKNESS												
60mm			70mm			80mm			90mm			100mm			
BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH

CryoWrap Anchored Support



Ordering Instructions:

To Order, Please Specify:
 - Model Number
 - Nominal Pipe Size
 - Insulation Thickness
 - BOP
 - Support Length
 - Vertical Load
 - Lateral Load
 - Axial Load
 - Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

DESIGNATION EXAMPLE

CACW - 8 x 30 - 4 - 24 - 4335 - 1520 - 1860

Model No.	Nominal Pipe Size (in)	Insulation Thickness (in)	BOP (in)	Support Length (L) (in)	Vertical Load (lbs)	Lateral Load (lbs)	Axial Load (lbs)
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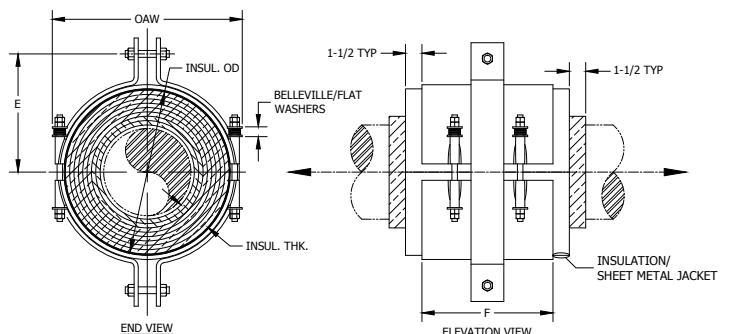
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CryoWrap Hanging Support

DESIGNATION
EXAMPLE**CHCW - 8 x 30 - 9 - 1200**

Model No.

Nominal Pipe Size (in) Insulation Thickness (in) Support Length (F) (in) Vertical Load (lbs)



NOTES:

1) All dimensions in inches unless noted.

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Support Length
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

Sizing Chart Cont'd

PIPE SIZE	VERT. LOAD (Lbs)	INSULATION THICKNESS											
		60mm			70mm			80mm			90mm		
		INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!													
1"	60	6.1	9	12.5	6.9	9	12.5	7.7	9	12.5	8.5	9	12.5
1-1/2"	90	6.7	9	12.5	7.5	9	12.5	8.2	9	12.5	9	9	12.5
2"	130	7.1	9	12.5	7.9	9	12.5	8.7	9	12.5	9.5	9	12.5
2-1/2"	195	7.6	9	12.5	8.4	9	12.5	9.2	9	12.5	10	9	12.5
3"	235	8.3	9	12.5	9.1	9	12.5	9.8	9	12.5	10.6	9	13.5
4"	305	9.3	9	14	10.1	9	14.5	10.8	9	15.5	11.6	9	16
6"	670	11.4	9	16	12.2	9	16.5	13	9	17.5	13.8	9	18
8"	1200	13.4	9	18	14.2	9	18.5	15	9	19.5	15.8	9	20.5
10"	1550	15.5	9	20	16.3	9	20.5	17.1	12	21.5	17.9	12	22.5
12"	3000	17.5	12	21	18.3	12	22	19.1	12	22.5	19.9	12	23.5
14"	3300	18.8	12	23	19.6	12	24	20.3	12	24.5	21.1	12	25.5
16"	3800	20.8	12	25.5	21.6	12	26.5	22.3	12	27	23.1	12	28
18"	4250	22.8	12	27.5	23.6	12	28.5	24.3	12	29	25.1	12	30
20"	4750	24.8	12	31.5	25.6	12	32.5	26.3	12	33	27.1	12	34
24"	8850	28.8	15	37.5	29.6	15	38.5	30.3	15	39	31.1	15	40
30"	11050	34.8	15	43.5	35.6	15	44.5	36.3	15	45	37.1	15	46
36"	13250	40.8	15	50	41.6	15	51	42.3	15	51.5	43.1	15	52.5
42"	15500	46.8	15	56	47.6	15	57	48.3	15	57.5	49.1	15	58.5

PIPE SIZE	VERT. LOAD (Lbs)	INSULATION THICKNESS											
		10mm			20mm			30mm			40mm		
		INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!													
1"	60	2.2	9	4	2.9	9	7.5	3.7	9	8.5	4.5	9	9.5
1-1/2"	90	2.7	9	4.5	3.5	9	7.5	4.3	9	8.5	5.1	9	9.5
2"	130	3.2	9	5	4	9	7.5	4.8	9	8.5	5.6	9	9.5
2-1/2"	195	3.7	9	5.5	4.5	9	8	5.3	9	8.5	6.1	9	9.5
3"	235	4.3	9	7.5	5.1	9	8.5	5.9	9	9	6.7	9	9.5
4"	305	5.3	9	10	6.1	9	10.5	6.9	9	11.5	7.7	9	12
6"	670	7.5	9	12	8.2	9	12.5	9	9	13.5	9.8	9	14
8"	1200	9.5	9	14	10.2	9	15	11	9	15.5	11.8	9	16.5
10"	1550	11.6	9	16	12.4	9	17	13.2	9	17.5	13.9	9	18.5
12"	3000	13.6	12	17	14.4	12	18	15.2	12	19	15.9	12	19.5
14"	3300	14.8	12	19	15.6	12	20	16.4	12	21	17.2	12	21.5
16"	3800	16.8	12	21.5	17.6	12	22.5	18.4	12	23.5	19.2	12	24
18"	4250	18.8	12	23.5	19.6	12	24.5	20.4	12	25.5	21.2	12	26
20"	4750	20.8	12	27.5	21.6	12	28.5	22.4	12	29.5	23.2	12	30
24"	8850	24.8	15	33.5	25.6	15	34.5	26.4	15	35.5	27.2	15	36
30"	11050	30.8	15	39.5	31.6	15	40.5	32.4	15	41.5	33.2	15	42
36"	13250	36.8	15	46	37.6	15	47	38.4	15	47.5	39.2	15	48.5
42"	15500	42.8	15	52	43.6	15	53	44.4	15	53.5	45.2	15	54.5

PIPE SIZE	VERT. LOAD (Lbs)	INSULATION THICKNESS											
		110mm											

PyroWrap

RILCO PyroWrap™ for High Temperatures

Service Temperature Ranges: -40°F (-40°C) to 1200°F (650°C)



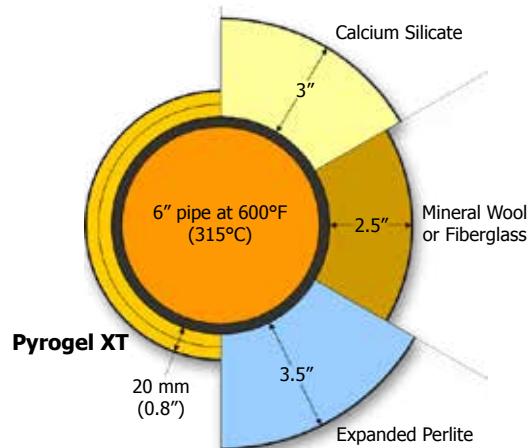
Physical Properties

Thicknesses*	0.20 in (5 mm)	0.40 in (10 mm)
Material Form*	60 in (1,500 mm) wide x 260 ft (80 m) long rolls	60 in (1,500 mm) wide x 155 ft (47 m) long rolls
Max. Use Temp.	1200°F (650°C)	
Density*	11 lb/ft³ (0.18 g/cc)	
Hydrophobic	Yes	



PyroWrap™ pipe supports provide special properties making them the most effective protection for high-temperature applications available. They have the lowest thermal conductivity of any known solid and are hydrophobic, offering a level of protection against corrosion under the insulation as well as flexible, recovering thermal performance after compression as high as 100 psi.

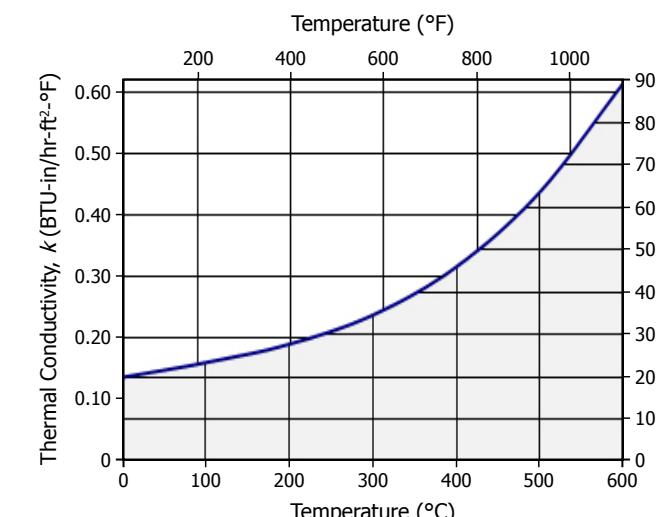
PyroWrap™ pipe supports utilize Aspen Aerogel's Pyrogel™ XT or Pyrogel™ XTF (fire protection grade) comprised of a silica aerogel blanket reinforced with non-woven glass-fiber batting. They are specifically engineered with 50% to 80% less thickness, making them substantially lighter in weight, thereby easing the installation process and reducing its associated cost.



All four designs provide same level of thermal efficiency

Thermal Conductivity[†]

ASTM C 177 Results



Mean Temp. °C	0	100	200	300	400	500	600
°F	32	212	392	572	752	932	1112
k mW/m-K	20	23	28	35	46	64	89
BTU-in/hr-ft²-°F	0.14	0.16	0.19	0.24	0.32	0.44	0.62

[†]Thermal conductivity measurements taken at a compressive load of 2 psi.



PyroWrap™

Cal-Sil

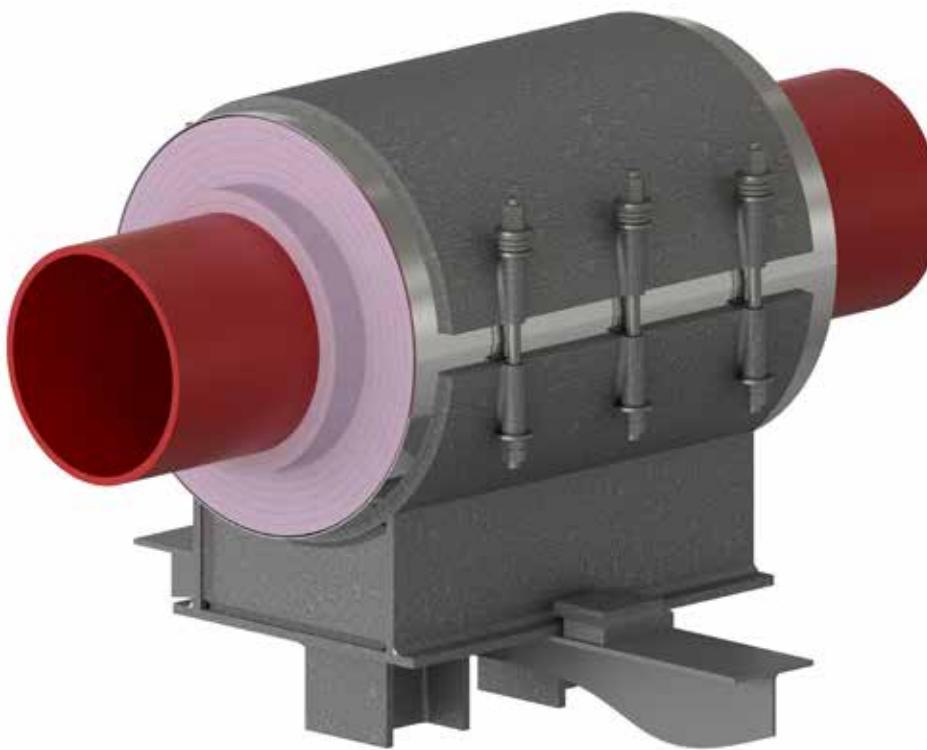
RILCO PyroWrap™ - Properties**Service Temperature Ranges: -40°F (-40°C) to 1200°F (650°C)**

Thermal Performance: PyroWrap™ pipe supports are the most efficient products available in the world for high temperature applications. They are 2-5 times thinner than other products with comparable thermal ratings.

Moisture Resistance: PyroWrap™ pipe supports are hydrophobic over the entire matrix of the insulation, not just the surface. The unique hydrophobic characteristic of Pyrogel™ insulation not only repels liquid water, but allows vapor to pass through the insulation and wick moisture away from the pipe, helping to prevent corrosion and deterioration of the substrate.

Structural Integrity: PyroWrap™ pipe supports provide superior structural integrity in comparison to other products commonly used in high temperature applications. PyroWrap™ systems design permits for the "modularization" of the pipe which then gives the option for the support systems and insulation to be pre-installed off-site, or on-site at a safe location.

Dimensional Stability: PyroWrap™ pipe supports allow minimal movement of the insulated system, yet remain flexible and experience no thermal shock. This design allows the usual issues of degraded insulation caused by contraction, extreme stress, structural damage and crack propagation problems encountered with standard insulation mediums to no longer be a concern.



Anchored Support Shown



Resting Support



Vertically Restrained Guided Support



Anchored Support



High Lateral Travel Support



Guided Support



Hanging Support

Applications & Features:

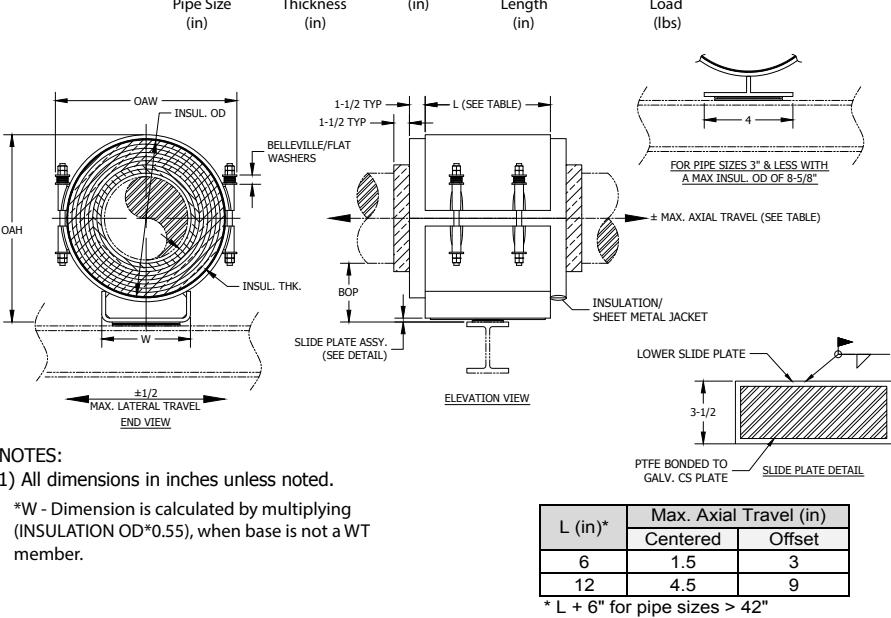
- Temperature range to -40 Deg F to 1200 Deg F
- Higher temperature applications available
- Teflon®/2B SS 304 slide plates on shoe
- Design loads based on a safety factor of 5
- A36 steel construction
- See technical specification RCS-750
- Test results available upon request
- Steel finish available in galvanized finish or painted
- Increased loading capability available. Contact Rilco for additional information
- Support constructed in accordance with ASME B31.1, B31.3 and MSS-SP58
- A307 or A193 B7 plated bolts/studs
- Patented anchor system allows increased load carrying and decreased heat transfer (Anchored Support)

For special applications or for information on other insulation thicknesses or pipe sizes, please contact us!

PyroWrap Resting Support

DESIGNATION
EXAMPLE**HSPW - 8 x 30 - 4 - 12 - 6800**

Model No.

Nominal
Pipe Size
(in)Insulation
Thickness
(in)BOP
(in)Support
Length
(in)Vertical
Load
(lbs)

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

Sizing Chart Cont'd

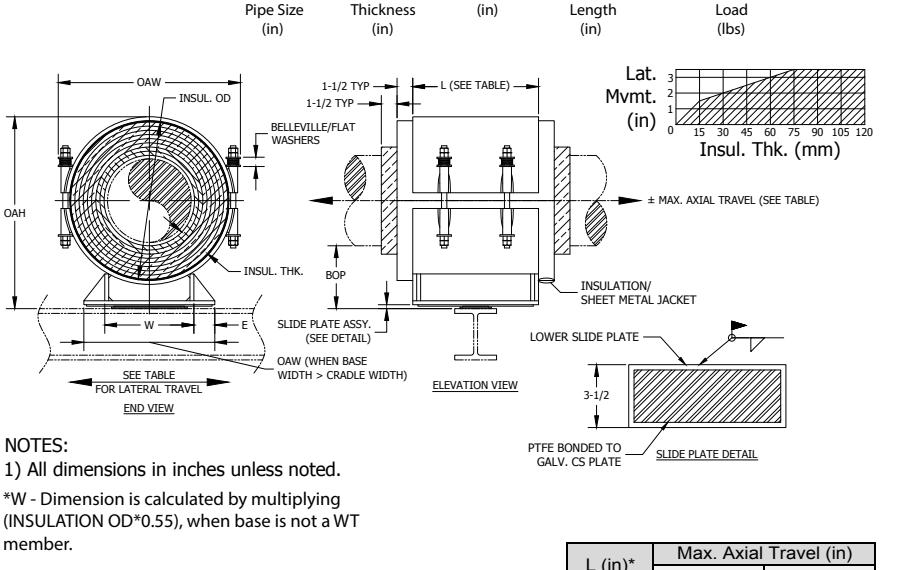
PIPE SIZE	LOW VERT. LOAD (lbs)	HIGH VERT. LOAD (lbs)	INSULATION THICKNESS																			
			60mm				70mm				80mm				90mm							
			BOP	INSUL.	OAW	OAH	BOP	INSUL.	OAW	OAH	BOP	INSUL.	OAW	OAH	BOP	INSUL.	OAW	OAH				
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																						
1/2"	140	550	4	1.7	3.5	5.5	4	2.5	4.5	6	4	3.3	5	6.5	4	4	4.8	6.5	7.5			
3/4"	175	700	4	1.9	4	6	4	2.7	4.5	6.5	4	3.5	5.5	6.5	4	4.2	6	7	4	5	7	7.5
1"	225	900	4	2.2	4	6	4	2.9	5	6.5	4	3.7	5.5	7	4	4.5	6.5	7.5	4	5.3	7	7.5
1-1/2"	325	1300	4	2.7	4.5	6.5	4	3.5	5.5	7	4	4.3	6	7.5	4	5.1	7	8	4	5.9	8	8.5
2"	375	1500	4	3.2	5	7	4	4	6	7.5	4	4.8	6.5	8	4	5.6	7.5	8.5	4	6.4	8.5	9
2-1/2"	460	1800	4	3.7	5.5	7.5	4	4.5	6.5	8	4	5.3	7	8.5	4	6.1	8	9	4	6.9	9	9.5
3"	530	2100	4	4.3	6	8.5	4	5.1	7	8.5	4	5.9	8	9	4	6.7	8.5	9.5	4	7.5	9.5	10
4"	840	3350	4	5.3	7	9.5	4	6.1	8	9.5	4	6.9	9	10	4	7.7	9.5	10.5	4	8.5	10.5	11
6"	1275	5100	4	7.5	10	11.5	4	8.2	10.5	12	4	9	11.5	12.5	4	9.8	12	12.5	4	10.6	13	13
8"	1700	6800	4	9.5	12	13.5	4	10.2	12.5	14	4	11	13.5	14.5	4	11.8	14	14.5	4	12.6	15	15
10"	2000	8000	4	11.6	14	15.5	4	12.4	15	16	4	13.2	15.5	16.5	4	13.9	16.5	17	4	14.7	17	17
12"	2200	8800	4	13.6	16	17.5	4	14.4	17	18	4	15.2	17.5	18.5	4	15.9	18.5	19	4	16.7	19	19
14"	2500	10000	4	14.8	17	19	4	15.6	18	19.5	4	16.4	19	19.5	4	17.2	19.5	20	4	18	20.5	20.5
16"	2900	11600	4	16.8	19	21	4	17.6	20	21.5	4	18.4	21	22	4	19.2	21.5	22	6	20	22.5	24.5
18"	3200	12800	4	18.8	21.5	23	4	19.6	22.5	23.5	4	20.4	23.5	24	4	21.2	24	24	6	22	25	26.5
20"	3400	13600	4	20.8	23.5	25	4	21.6	24.5	25.5	4	22.4	25.5	26	4	23.2	26	26	6	24	27	28.5
24"	3600	14400	4	24.8	27.5	29	4	25.6	28.5	29.5	4	26.4	29.5	30	4	27.2	30	30.5	6	28	31	32.5
30"	4700	18800	4	30.8	33.5	35	4	31.6	34.5	35.5	4	32.4	35.5	36	6	33.2	36	38.5	6	34	37	38.5
36"	5500	22000	4	36.8	39.5	41	4	37.6	40.5	41.5	4	38.4	41.5	42	6	39.2	42	44.5	6	40	43	44.5
42"	6200	24800	4	42.8	46	47	4	43.6	47	47.5	4	44.4	47.5	48	6	45.2	48.5	50.5	6	46	49	50.5
48"	7100	28400	4	48.8	52	53	4	49.6	53	53.5	4	50.4	53.5	54	6	51.2	54.5	56.5	6	52	55	56.5
56"	8300	33100	4	56.8	60	61	4	57.6	61	61.5	4	58.4	61.5	62	6	59.2	62.5	64.5	6	60	63	64.5
60"	8900	35500	4	60.8	64	65	4	61.6	65	65.5	4	62.4	65.5	66	6	63.2	66.5	68.5	6	64	67	68.5
66"	9800	39000	4	66.8	70	70	4	67.6	71	70.5	4	68.4	71.5	71	6	69.2	72.5	73.5	6	70	73	73.5
72"	10700	42600	4	72.8	76	77	4	73.6	77	77.5	4	74.4	77.5	78	6	75.2	78.5	80.5	6	76	79	80.5

PIPE SIZE	LOW VERT. LOAD (lbs)	HIGH VERT. LOAD (lbs)	INSULATION THICKNESS															
			10mm				20mm				30mm				40mm			
			BOP	INSUL.	OAW	OAH	BOP	INSUL.										

PyroWrap High Lateral Travel Support

DESIGNATION
EXAMPLE**HS(H)PW - 8 x 30 - 4 - 12 - 6800**

Model No.

Nominal
Pipe Size
(in)Insulation
Thickness
(in)BOP
(in)Support
Length
(in)Vertical
Load
(lbs)

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

NOTES:

- 1) All dimensions in inches unless noted.
- *W - Dimension is calculated by multiplying (INSULATION OD*0.55), when base is not a WT member.

L (in)*	Max. Axial Travel (in)	
	Centered	Offset
6	1.5	3
12	4.5	9

* L + 6" for pipe sizes > 42"

PIPE SIZE	LOW VERT. LOAD (lbs)	HIGH VERT. LOAD (lbs)	INSULATION THICKNESS																
			60mm				70mm				80mm				90mm				
			BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																			
1/2"	140	550	4	1.7	3.5	5.5	4	2.5	4.5	6	4	3.3	5	6.5	4	4	4.8	6.5	7.5
3/4"	175	700	4	1.9	4	6	4	2.7	4.5	6.5	4	3.5	5.5	6.5	4	4.2	6	7	4
1"	225	900	4	2.2	4	6	4	2.9	5	6.5	4	3.7	5.5	7	4	4.5	6.5	7.5	4
1-1/2"	325	1300	4	2.7	4.5	0	4	3.5	5.5	0	4	4.3	6	7.5	4	5.1	7	8	4
2"	375	1500	4	3.2	5	0	4	4	6	7.5	4	4.8	6.5	8	4	5.6	7.5	8.5	4
2-1/2"	460	1800	4	3.7	5.5	0	4	4.5	6.5	8	4	5.3	7	8.5	4	6.1	8	9	4
3"	530	2100	4	4.3	6	8.5	4	5.1	7	8.5	4	5.9	8	9	4	6.7	8.5	9.5	4
4"	840	3350	4	5.3	7	9.5	4	6.1	8	9.5	4	6.9	9	10	4	7.7	9.5	10.5	4
6"	1275	5100	4	7.5	10	11.5	4	8.2	10.5	12	4	9	11.5	12.5	4	9.8	12	12.5	4
8"	1700	6800	4	9.5	12	13.5	4	10.2	12.5	14	4	11	13.5	14.5	4	11.8	14	14.5	4
10"	2000	8000	4	11.6	14	15.5	4	12.4	15	16	4	13.2	15.5	16.5	4	13.9	16	17	4
12"	2200	8800	4	13.6	16	17.5	4	14.4	17	18	4	15.2	17.5	18.5	4	15.9	18.5	19	4
14"	2500	10000	4	14.8	17	19	4	15.6	18	19.5	4	16.4	19	19.5	4	17.2	19.5	20	4
16"	2900	11600	4	16.8	19	21	4	17.6	20	21.5	4	18.4	21	22	4	19.2	21.5	22	6
18"	3200	12800	4	18.8	21.5	23	4	19.6	22.5	23.5	4	20.4	23.5	24	4	21.2	24	24	6
20"	3400	13600	4	20.8	23.5	25	4	21.6	24.5	25.5	4	22.4	25.5	26	4	23.2	26	26	6
24"	3600	14400	4	24.8	27.5	29	4	25.6	28.5	29.5	4	26.4	29.5	30	4	27.2	30	30.5	6
30"	4700	18800	4	30.8	33.5	35	4	31.6	34.5	35.5	4	32.4	35	36	6	33.2	36	38.5	6
36"	5500	22000	4	36.8	39.5	41	4	37.6	40.5	41.5	4	38.4	41.5	42	6	39.2	42	44.5	6
42"	6200	24800	4	42.8	46	47	4	43.6	47	47.5	4	44.4	47.5	48	6	45.2	48.5	50.5	6
48"	7100	28400	4	48.8	52	53	4	49.6	53	53.5	4	50.4	53.5	54	6	51.2	54.5	56.5	6
56"	8300	33100	4	56.8	60	61	4	57.6	61	61.5	4	58.4	61.5	62	6	59.2	62.5	64.5	6
60"	8900	35500	4	60.8	64	65	4	61.6	65	65.5	4	62.4	65.5	66	6	63.2	66.5	68.5	6
66"	9800	39000	4	66.8	70	70	4	67.6	71	70.5	4	68.4	71.5	71	6	69.2	72.5	73.5	6
72"	10700	42600	4	72.8	76	77	4	73.6	77	77.5	4	74.4	77.5	78	6	75.2	78.5	80.5	6

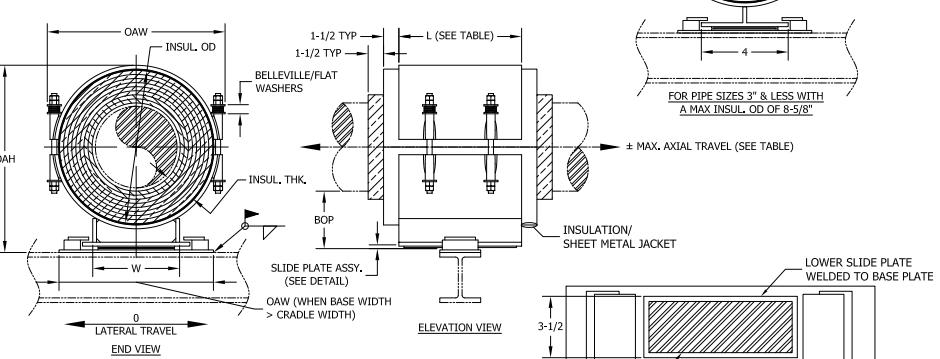
Sizing Chart Cont'd

PIPE SIZE	LOW VERT. LOAD (lbs)	HIGH VERT. LOAD (lbs)	INSULATION THICKNESS															
			110mm				120mm											

PyroWrap Vertically Restrained Guided Support

DESIGNATION
EXAMPLE**HGPW - 8 x 30 - 4 - 12 - 6800 - 3400**

Model No.

Nominal Pipe Size
(in) Insulation Thickness
(in) BOP
(in) Support Length
(in)Vertical Load
(lbs) Lateral Load
(lbs)

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

NOTES:

- 1) All dimensions in inches unless noted.
- *W - Dimension is calculated by multiplying (INSULATION OD*0.65), when base is not a WT member.

L (in)*	Max. Axial Travel (in)	
	Centered	Offset
6	1.5	3
12	4.5	9

* L + 6" for pipe sizes > 42"

PIPE SIZE	LOW LOAD OPTION		HIGH LOAD OPTION		INSULATION THICKNESS																			
					10mm			20mm			30mm			40mm			50mm							
	VERT. (lbs)	LAT. (lbs)	VERT. (lbs)	LAT. (lbs)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)				
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																								
1/2"	140	50	550	275	4	1.7	6	5.5	4	2.5	6	6	4	3.3	6	6.5	4	4	6	7	4	4.8	6.5	7.5
3/4"	175	65	700	350	4	1.9	6	6	4	2.7	6	6.5	4	3.5	6	6.5	4	4.2	6	7	4	5	7	7.5
1"	225	80	900	450	4	2.2	6	6	4	2.9	6	6.5	4	3.7	6	7	4	4.5	6.5	7.5	4	5.3	7	7.5
1-1/2"	325	115	1300	650	4	2.7	6	6.5	4	3.5	6	7	4	4.3	6	7.5	4	5.1	7	8	4	5.9	8	8.5
2"	375	135	1500	750	4	3.2	6	7	4	4	6	7.5	4	4.8	6.5	8	4	5.3	7	8	4	6.4	8.5	9
2-1/2"	460	165	1800	900	4	3.7	6	7.5	4	4.5	6.5	8	4	5.3	7	8.5	4	6.1	8	9	4	6.9	9	9.5
3"	530	190	2100	1050	4	4.3	6	8.5	4	5.1	7	8.5	4	5.9	8	9	4	6.7	8.5	9.5	4	7.5	9.5	10
4"	840	295	3350	1675	4	5.3	7.5	9.5	4	6.1	8	9.5	4	6.9	9	10	4	7.7	9.5	10.5	4	8.5	10.5	11
6"	1275	450	5100	2550	4	7.5	10	11.5	4	8.2	10.5	12	4	9	11.5	12.5	4	9.8	12	12.5	4	10.6	13	13
8"	1700	595	6800	3400	4	9.5	12	13.5	4	10.2	12.5	14	4	11	13.5	14.5	4	11.8	14	14.5	4	12.6	15	15
10"	2000	700	8000	4000	4	11.6	14	15.5	4	12.4	15	16	4	13.2	15.5	16.5	4	13.9	16.5	17	4	14.7	17	17
12"	2200	770	8800	4400	4	13.6	16	17.5	4	14.4	17	18	4	15.2	17.5	18.5	4	15.9	18.5	19	4	16.7	19	19
14"	2500	875	10000	5000	4	14.8	17	19	4	15.6	18	19.5	4	16.4	19	19.5	4	17.2	19.5	20	4	18	20.5	20.5
16"	2900	1015	11600	5800	4	16.8	19	21	4	17.6	20	21.5	4	18.4	21	22	4	19.2	21.5	22	6	20	22.5	24.5
18"	3200	1120	12800	6400	4	18.8	21.5	23	4	19.6	22.5	23.5	4	20.4	23.5	24	4	21.2	24	24	6	22	25.5	26.5
20"	3400	1190	13600	6800	4	20.8	23.5	25	4	21.6	24.5	25.5	4	22.4	25.5	26	4	23.2	26	26	6	24	27	28
24"	3600	1260	14400	7200	4	24.8	27.5	29	4	25.6	28.5	29.5	4	26.4	29.5	30	4	27.2	30	30.5	6	28	31	32.5
30"	4700	1645	18800	9400	4	30.8	33.5	35	4	31.6	34.5	35.5	4	32.4	35.5	36	6	33.2	36	38.5	6	34	37	38.5
36"	5500	1925	22000	11000	4	36.8	39.5	41	4	37.6	40.5	41.5	4	38.4	41.5	42	6	39.2	42	44.5	6	40	43	44.5
42"	6200	2170	24800	8680	4	42.8	46	47	4	43.6	47	47.5	4	44.4	47.5	48	6	45.2	48.5	50.5	6	46	49	50.5
48"	7100	2485	28400	9940	4	48.8	52	53	4	49.6	53	53.5	4	50.4	53.5	54	6	51.2	54.5	56.5	6	52	55	56.5
56"	8300	2905	33100	11585	4	56.8	60	61	4	57.6	61	61.5	4	58.4	61.5	62	6	59.2	62.5	64.5	6	60	63	64.5
60"	8900	3115	35500	12425	4	60.8	64	65	4	61.6	65	65.5	4	62.4	65.5	66	6	63.2	66.5	68.5	6	64	67	68.5
66"	9800	3430	39000	13650	4	66.8	70	70	4	67.6	71	70.5	4	68.4	71.5	71	6	69.2	72.5	73.5	6	70	73	73.5
72"	10700	3745	42600	14910	4	72.8	76	77	4	73.6	77	77.5	4	74.4	77.5	78	6	75.2	78.5	80.5	6	76	79	80.5

PyroWrap Guided Support



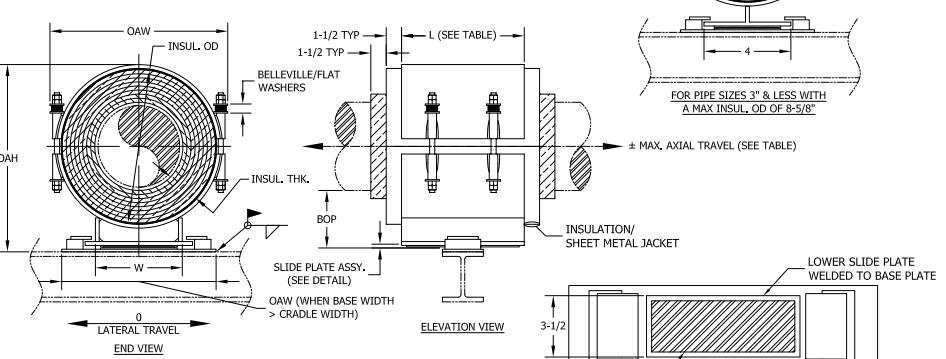
DESIGNATION EXAMPLE

HG(L)PW - 8 x 30 - 4 - 12 - 6800 - 3400

Model No.

Nominal Pipe Size (in) Insulation Thickness (in) BOP (in) Support Length (in)

Vertical Load (lbs) Lateral Load (lbs)



Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

PIPE SIZE	LOW LOAD OPTION		HIGH LOAD OPTION		INSULATION THICKNESS																			
					10mm				20mm				30mm				40mm				50mm			
	VERT. (lbs)	LAT. (lbs)	VERT. (lbs)	LAT. (lbs)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. OD (in)	OAW (in)	OAH (in)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																								
1/2"	140	70	550	275	x	x	x	x	x	x	x	x	4	4	7	7	4	4.8	7.5	7.5				
3/4"	175	90	700	350	x	x	x	x	x	x	x	x	4	4.2	7	7	4	5	7.5	7.5				
1"	225	115	900	450	x	x	x	x	x	x	x	x	4	4.5	7	7.5	4	5.3	7.5	7.5				
1-1/2"	325	165	1300	650	x	x	x	x	x	x	x	x	4	4.3	7	7.5	4	5.1	7.5	8	4	5.9	8	8.5
2"	375	190	1500	750	x	x	x	x	x	x	x	x	4	4.8	7.5	8	4	5.6	8	8.5	9			
2-1/2"	460	230	1800	900	x	x	x	x	x	x	x	x	4	4.5	7	8	4	5.3	8.5	9	4	6.1	8	9
3"	530	265	2100	1050	4	4.3	7	8.5	4	5.1	7.5	8.5	4	5.9	8	9	4	6.7	8.5	9.5	4	7.5	9.5	10
4"	840	420	3350	1675	4	5.3	7.5	9.5	4	6.1	8	9.5	4	6.9	9	10	4	7.7	9.5	10.5	4	8.5	10.5	11
6"	1275	640	5100	2550	4	7.5	11	11.5	4	8.2	11.5	12	4	9	12	12.5	4	9.8	12.5	12.5	4	10.6	13	13
8"	1700	850	6800	3400	4	9.5	12.5	13.5	4	10.2	13	14	4	11	13.5	14.5	4	11.8	14	14.5	4	12.6	15	15
10"	2000	1000	8000	4000	4	11.6	16	15.5	4	12.4	16.5	16	4	13.2	17	16.5	4	13.9	17.5	17	4	14.7	18	17
12"	2200	1100	8800	4400	4	13.6	17	17.5	4	14.4	17.5	18	4	15.2	18	18.5	4	15.9	18.5	19	4	16.7	19	19
14"	2500	1250	10000	5000	4	14.8	18	19	4	15.6	18.5	19.5	4	16.4	19	19.5	4	17.2	19.5	20	4	18	20.5	20.5
16"	2900	1450	11600	5800	4	16.8	19	21	4	17.6	20	21.5	4	18.4	21	22	4	19.2	21.5	22	6	20	22.5	24.5
18"	3200	1600	12800	6400	4	18.8	21.5	23	4	19.6	22.5	23.5	4	20.4	23.5	24	4	21.2	24	24	6	22	25	26.5
20"	3400	1700	13600	6800	4	20.8	23.5	25	4	21.6	24.5	25.5	4	22.4	25.5	26	4	23.2	26	26	6	24	27	28.5
24"	3600	1800	14400	7200	4	24.8	27.5	29	4	25.6	28.5	29.5	4	26.4	29.5	30	4	27.2	30	30.5	6	28	31	32.5
30"	4700	2350	18800	9400	4	30.8	33.5	35	4	31.6	34.5	35.5	4	32.4	35.5	36	6	33.2	36	38.5	6	34	37	38.5
36"	5500	2750	22000	11000	4	36.8	39.5	41	4	37.6	40.5	41.5	4	38.4	41.5	42	6	39.2	42	44.5	6	40	43	44.5
42"	6200	3100	24800	12400	4	42.8	46	47	4	43.6	47	47.5	4	44.4	47.5	48	6	45.2	48.5	50.5	6	46	49	50.5
48"	7100	3550	28400	14200	4	48.8	52	53	4	49.6	53	53.5	4	50.4	53.5	54	6	51.2	54.5	56.5	6	52	55	56.5
56"	8300	4150	33100	16550	4	56.8	60	61	4	57.6	61	61.5	4	58.4	61.5	62	6	59.2	62.5	64.5	6	60	63	64.5
60"	8900	4450	35500	17750	4	60.8	64	65	4	61.6	65	65.5	4	62.4	65.5	66	6	63.2	66.5	68.5	6	64	67	68.5
66"	9800	4900	39000	19500	4	66.8	70	70	4	67.6	71	70.5	4	68.4	71.5	71	6	69.2	72.5	73.5	6	70	73	73.5
72"	10700	5350	42600	21300	4	72.8	76	77	4	73.6	77	77.5	4	74.4	77.5	78	6	75.2	78.5	80.5	6	76	79	80.5

Sizing Chart Cont'd

PIPE SIZE	LOW LOAD OPTION	
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PyroWrap Anchored Support



Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Axial Load
- Movements

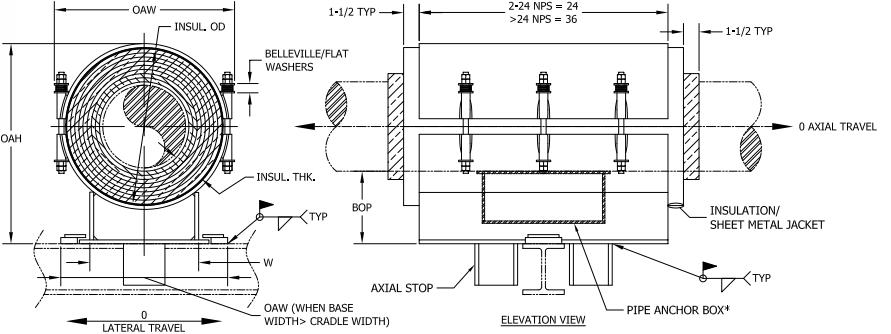
* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

DESIGNATION EXAMPLE

HAPW - 8 x 30 - 4 - 24 - 5950 - 2085 - 8930

Model No. Nominal Pipe Size (in) Insulation Thickness (in) BOP (in) Support Length (in) Vertical Load (lbs) Lateral Load (lbs) Axial Load (lbs)



NOTES)

1) All dimensions in inches unless noted.

* Pipe anchor box to be compatible with process pipe material.

*W - Dimension is calculated by multiplying (INSULATION OD*0.85).

Sizing Chart Cont'd

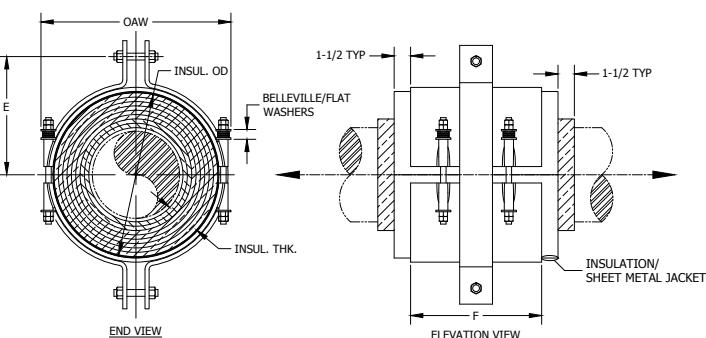
PIPE SIZE	LOW LOAD OPTION			HIGH LOAD OPTION			INSULATION THICKNESS																			
	VERT. (lbs)	LAT. (lbs)	AXI. (lbs)	VERT. (lbs)	LAT. (lbs)	AXI. (lbs)	60mm			70mm			80mm			90mm			100mm							
							BOP (in)	INSUL. (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. (in)	OAW (in)	OAH (in)	BOP (in)	INSUL. (in)	OAW (in)	OAH (in)				
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																										
1"	200	70	410	910	320	1360	4	2.2	6	6	4	2.9	6.5	6.5	4	3.7	7	7	4	4.5	8	7.5	4	5.3	8.5	7.5
1-1/2"	290	105	590	1310	460	1970	4	2.7	6.5	6.5	4	3.5	7	7	4	4.3	7.5	7.5	4	5.1	8.5	8	4	5.9	9	8.5
2"	360	130	730	1640	575	2460	4	3.2	6.5	7	4	4	7.5	7.5	4	4.8	8	8	4	5.6	9	8.5	4	6.4	9.5	9
2-1/2"	440	155	890	1980	695	2980	4	3.7	7	7.5	4	4.5	8	8	4	5.3	8.5	8.5	4	6.1	9	9	4	6.9	10	9.5
3"	530	190	1400	2420	850	3620	4	4.3	7.5	8.5	4	5.1	8.5	8.5	4	5.9	9	9	4	6.7	9.5	9.5	4	7.5	10.5	10
4"	840	295	1730	3110	1090	4660	4	5.3	8.5	9.5	4	6.1	9	9.5	4	6.9	10	10	4	7.7	10.5	10.5	4	8.5	11	11
6"	1275	450	2400	4570	1600	6860	4	7.5	10.5	11.5	4	8.2	11	12	4	9	11.5	12.5	4	9.8	12.5	12.5	4	10.6	13	13
8"	1700	595	3020	5950	2085	8930	4	9.5	12	13.5	4	10.2	12.5	14	4	11	13.5	14.5	4	11.8	14	14.5	4	12.6	15	15
10"	2000	700	3700	7420	2600	11130	4	11.6	14	15.5	4	12.4	15	16	4	13.2	15.5	16.5	4	13.9	16.5	17	4	14.7	17	17
12"	2200	770	4320	8800	3080	13200	4	13.6	16	17.5	4	14.4	17	18	4	15.2	17.5	18.5	4	15.9	18.5	19	4	16.7	19	19
14"	2500	875	4700	10000	3500	15000	4	14.8	17	19	4	15.6	18	19.5	4	16.4	19	19.5	4	17.2	19.5	20	4	18	20.5	20.5
16"	2900	1015	5340	11600	4060	17400	4	16.8	19	21	4	17.6	20	21.5	4	18.4	21	22	4	19.2	21.5	22	6	20	22.5	24.5
18"	3200	1120	5970	12800	4480	19200	4	18.8	21.5	23	4	19.6	22.5	23.5	4	20.4	23.5	24	4	21.2	24	24	6	22	25	26.5
20"	3400	1190	6600	13600	4760	20400	4	20.8	23.5	25	4	21.6	24.5	25.5	4	22.4	25	26	4	23.2	26	26	6	24	27	28.5
24"	3600	1260	7850	14400	5040	21600	4	24.8	27.5	29	4	25.6	28.5	29.5	4	26.4	29.5	30	4	27.2	30	30.5	6	28	31	32.5
30"	4700	1645	9740	18800	6580	28200	4	30.8	33.5	35	4	31.6	34.5	35.5	4	32.4	35.5	36	6	33.2	36	38.5	6	34	37	38.5
36"	5500	1925	11600	22000	7700	33000	4	36.8	39.5	41	4	37.6	40.5	41.5	4	38.4	41.5	42	6	39.2	42	44.5	6	40	43	44.5
42"	6200	2170	13500	24800	8680	37200	4	42.8	46	47	4	43.6	47	47.5	4	44.4	47.5	48	6	45.2	48.5	50.5	6	46	49	50.5
48"	7100	2485	15460	28400	9940	61830	4	48.8	52	53	4	49.6	53	53.5	4	50.4	53.5	54	6	51.2	54.5	56.5	6	52	55	56.5
56"	8300	2905	18070	33100	11585	72060	4	56.8	60	61	4	57.6	61	61.5	4	58.4	61.5	62	6	59.2	62.5	64.5	6	60	63	64.5
60"	8900	3115	19380	35500	12425	77290	4	60.8	64	65	4	61.6	65	65.5	6	62.4	65	66	6	63.2	66.5	68.5	6	64	67	68.5
66"	9800	3430	21340	39000	13650	84910	4	66.8	70	70	4	67.6	71	70.5	4	68.4	71.5	71	6	69.2	72.5	73.5	6	70	73	73.5
72"	10700	3745	23300	42600	14910	92750	4	72.8	76	77	4	73.6	77	77.5	4	74.4	77.5	78	6	75.2	78.5	80.5	6	76	79	80.5

PyroWrap Hanging Support

DESIGNATION
EXAMPLE**HHPW - 8 x 30 - 9 - 1200**

Model No.

Nominal Pipe Size Insulation Thickness Support Length (F) Vertical Load

NOTES:
1) All dimensions in inches unless noted.

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Support Length (F)
- Vertical Load
- Movements

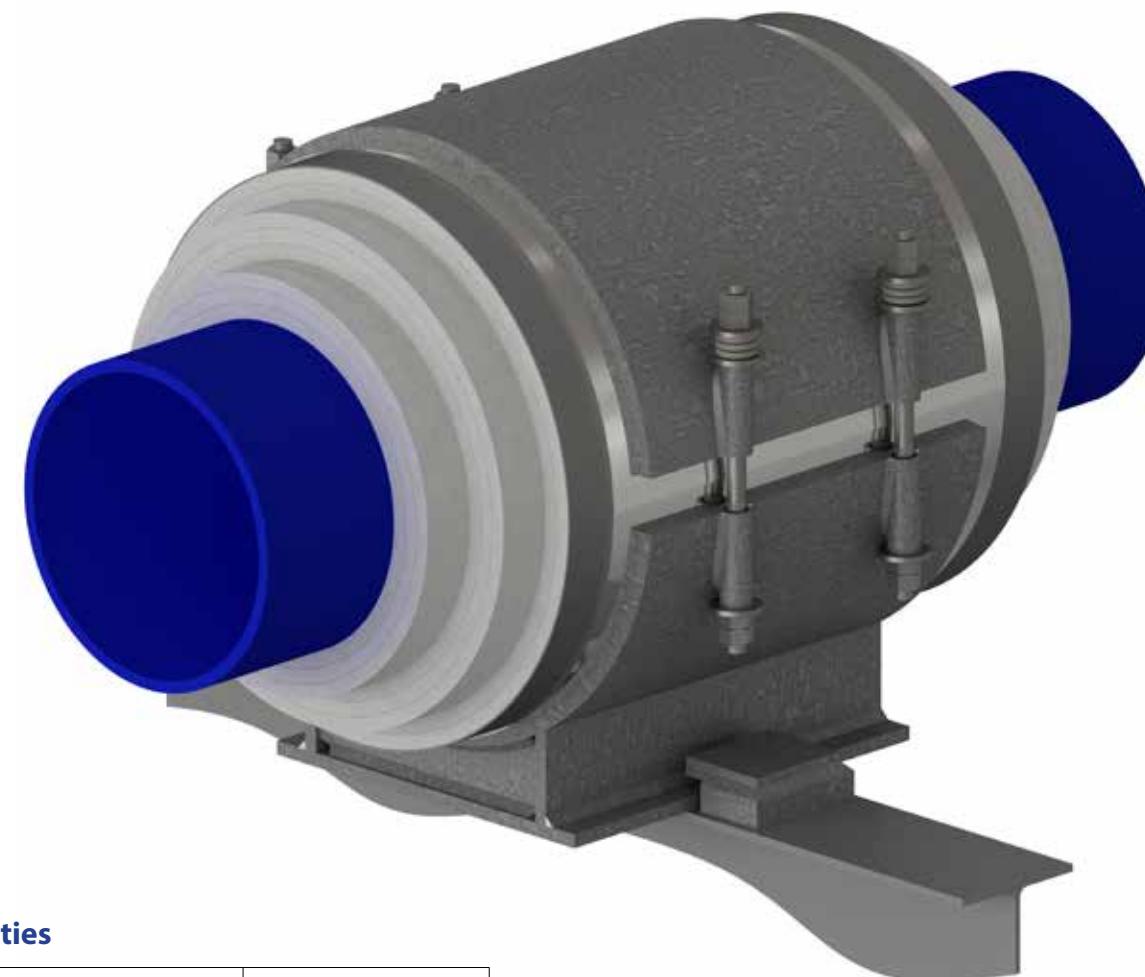
* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

PIPE SIZE	LOW VERT. LOAD (lbs)	HIGH VERT. LOAD (lbs)	INSULATION THICKNESS														
			10mm			20mm			30mm			40mm			50mm		
INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																	
1"	60	180	2.2	9	4	2.9	9	6.5	3.7	9	7	4.5	9	8	5.3	9	8.5
1-1/2"	90	375	2.7	9	4.5	3.5	9	7	4.3	9	7.5	5.1	9	8.5	5.9	9	9
2"	130	570	3.2	9	5	4	9	7.5	4.8	9	8	5.6	9	9	6.4	9	9.5
2-1/2"	195	760	3.7	9	5.5	4.5	9	8	5.3	9	8.5	6.1	9	9	6.9	9	10
3"	235	955	4.3	9	7.5	5.1	9	8.5	5.9	9	9	6.7	9	9.5	7.5	9	10.5
4"	305	1340	5.3	9	10	6.1	9	10.5	6.9	9	11.5	7.7	9	12	8.5	9	13
6"	670	2110	7.5	9	12	8.2	9	12.5	9	9	13.5	9.8	9	14	10.6	9	15
8"	1200	2885	9.5	9	14	10.2	9	15	11	9	15.5	11.8	9	16.5	12.6	12	17
10"	1550	3655	11.6	12	16	12.4	12	17	13.2	12	17.5	13.9	12	18.5	14.7	12	19
12"	3000	4425	13.6	12	17	14.4	12	18	15.2	12	19	15.9	12	19.5	16.7	12	20.5
14"	3300	5200	14.8	12	19	15.6	12	20	16.4	12	21	17.2	12	21.5	18	12	22.5
16"	3800	5970	16.8	12	21.5	17.6	12	22.5	18.4	12	23.5	19.2	12	24	20	12	25
18"	4250	6740	18.8	12	23.5	19.6	12	24.5	20.4	12	25.5	21.2	12	26	22	12	27
20"	4750	7515	20.8	12	27.5	21.6	12	28.5	22.4	12	29.5	23.2	12	30	24	12	31
24"	8850	9055	24.8	12	33.5	25.6	12	34.5	26.4	12	35.5	27.2	15	36	28	15	37
30"	11050	11370	30.8	15	39.5	31.6	15	40.5	32.4	15	41.5	33.2	15	42	34	15	43
36"	13250	13685	36.8	15	46	37.6	15	47	38.4	15	47.5	39.2	15	48.5	40	15	49
42"	15500	16000	42.8	15	52	43.6	15	53	44.4	15	53.5	45.2	15	54.5	46	15	55

PIPE SIZE	LOW VERT. LOAD (lbs)	HIGH VERT. LOAD (lbs)	INSULATION THICKNESS														
			60mm			70mm			80mm			90mm			100mm		
			INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)	INSUL. OD (in)	F (in)	OAW (in)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																	
1"	60	180	6.1	9	9	6.9	9	10	7.7	9	10.5	8.5	9	11	9.2	9	12
1-1/2"	90	375	6.7	9	9.5	7.5	9	10.5	8.2	9	11	9	9	11.5	9.8	9	12.5
2"	130	570	7.1	9	10	7.9	9	10.5	8.7	9	11.5	9.5	9	12	10.3	9	13
2-1/2"	195	760	7.6	9	10.5	8.4	9	11	9.2	9	12	10	9	12.5	10.8	9	13.5
3"	235	955	8.3	9	11	9.1	9	12	9.8	9	12.5	10.6	9	13.5	11.4	9	14.5
4"	305	1340	9.3	9	14	10.1	9	14.5	10.8	9	15.5	11.6	9	16	12.4	9	17
6"	670	2110	11.4	9	16	12.2	9	16.5	13	9	17.5	13.8	9	18	14.5	9	19
8"	1200	2885	13.4	12	18	14.2	12	18.5	15	12	19.5	15.8	12	20.5	16.5	12	21
10"	1550	3655	15.5	12	20	16.3	12	20.5	17.1	12	21.5	17.9	12	22.5	18.7	12	23
12"	3000	4425	17.5	12	21	18.3	12	22	19.1	12	22.5	19.9	12	23.5	20.7	12	24.5
14"	3300	5200	18.8	12	23	19.6	12	24	20.3	12	24.5	21.1	12	25.5	21.9	12	26.5
16"	3800	5970	20.8	12	25.5	21.6	12	26.5	22.3	12	27	23.1	12	28	23.9	12	29
18"	4250	6740	22.8	12	27.5	23.6	12	28.5									

CryoWrap

M
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Physical Properties

Thicknesses*	0.20 in (5 mm)	0.40 in (10 mm)
Material Form*	57 in (1,450 mm) wide x 211 ft (64 m) long rolls	57 in (1,450 mm) wide x 126 ft (38 m) long rolls
Max. Use Temp.	195°F (90°C)	
Color	White	
Density*	8.0 lb/ft³ (0.13 g/cc)	
Hydrophobic	Yes	

Nominal Values

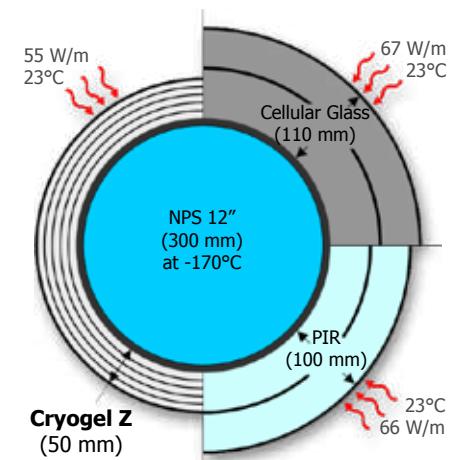
RILCO CryoWrap™ for Cryogenic and Sub-Ambient Applications

Service Temperature Ranges: -460°F (-270°C) to 195°F (90°C)



CryoWrap™ pipe supports provide unique properties which makes them the ultimate in thermal protection for cryogenic requirements. The extremely low thermal conductivity reduces heat gain and liquid "boil-off" with no water access or egress. While its superior resistance to mechanical abuse attests to the product's durability, the smaller circumference eases installation and reduces labor costs.

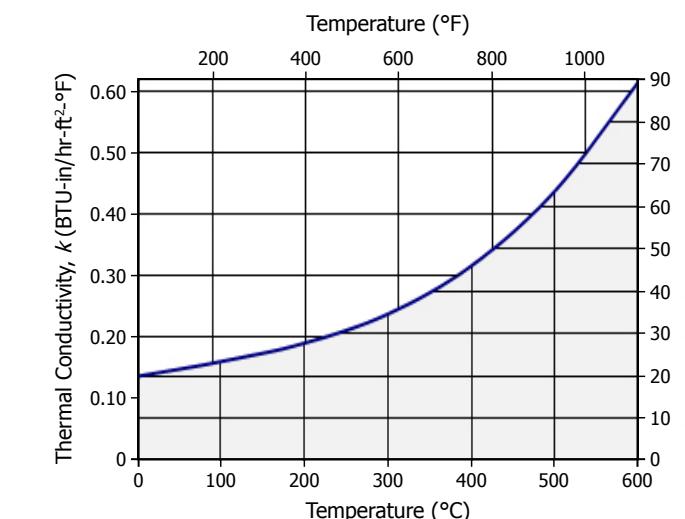
CryoWrap™ pipe supports utilize Aspen Aerogel's Cryo-gel™ Z with an integral vapor barrier and are specifically engineered with 50%-75% less thickness, lighter weight and no water permeability.



All three designs meet the same condensation control criteria

Thermal Conductivity†

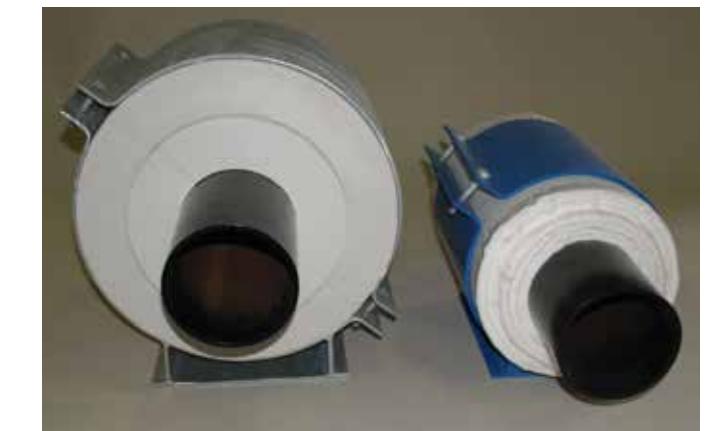
ASTM C 177 Results



Mean Temp.	°C	0	100	200	300	400	500	600
	°F	32	212	392	572	752	932	1112
<i>k</i>	mW/m-K	20	23	28	35	46	64	89
	BTU-in/hr-ft²-°F	0.14	0.16	0.19	0.24	0.32	0.44	0.62

†Thermal conductivity measurements taken at a compressive load of 2 psi.

Comparable Insulation Ratings



Polyurethane

CryoWrap™

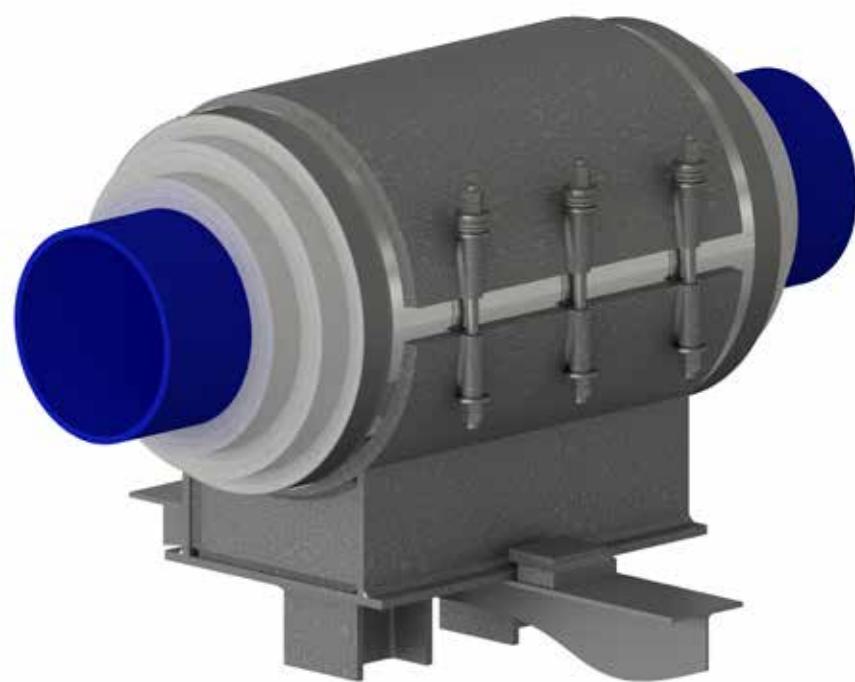
RILCO CryoWrap™ - Properties**Service Temperature Ranges: -460°F (-270°C) to 195°F (90°C)**M
E
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Thermal Performance: CryoWrap™ pipe supports have the lowest thermal conductivity of any support available for cryogenic or sub-ambient applications. They are much smaller in circumference than other supports, allowing for a smaller surface area and therefore reduced heat gain. In most instances condensation control thickness is sufficient to meet the desired heat gain limits. This heat gain "safety factor" maximizes system performance by improving process control, reducing boil-off and saving energy. The thermal performance remains constant since there are no blowing agents to diffuse.

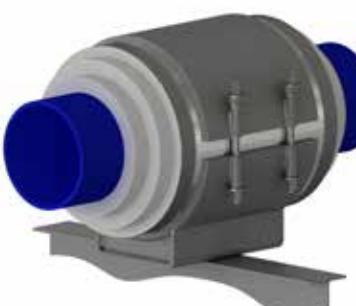
Moisture and Vapor Resistance: CryoWrap™ pipe supports with their integral vapor barrier, provides the only zero-perm system available for cryogenic applications.

Structural Integrity: CryoWrap™ pipe supports are the optimal choice for sub-ambient and cryogenic applications because they remain flexible and experience no thermal shock. Therefore the usual issues of degraded insulation caused by contraction, extreme stress, structural damage and the typical freeze-thaw crack propagation problems encountered with the standard insulation mediums are no longer a concern.

Dimensional Stability: CryoWrap™ pipe supports allow minimal movement of the insulated system because of a low thermal expansion coefficient. The flexibility and low contraction rate eliminates the need for labor intensive and more costly expansion/contraction joints required by other products.



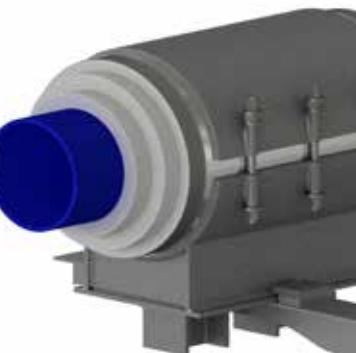
Anchored Support Shown



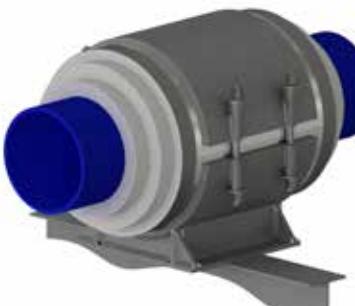
Resting Support



Vertically Restrained Guided Support



Anchored Support



High Lateral Travel Support



Guided Support



Hanging Support

Applications & Features:

- Temperature range to -270 Deg C to 90 Deg C
- Higher temperature applications available
- Teflon®/2B SS 304 slide plates on shoe and supporting steel on sizes 26" and larger
- Design loads based on a safety factor of 5
- A36 steel construction
- See technical specification RCS-750
- Test results available upon request
- Steel finish available in galvanized finish or painted
- Increased loading capability available. Contact Rilco for additional information
- Support constructed in accordance with ASME B31.1, B31.3 and MSS-SP58
- A307 or A193 B7 plated bolts/studs
- Patented anchor system allows increased load carrying and decreased heat transfer (Anchored Suport)

For special applications or for information on other insulation thicknesses or pipe sizes, please contact us!

M
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CryoWrap Resting Support



DESIGNATION EXAMPLE

CSCW - 8 x 30 - 100 - 300 - 23

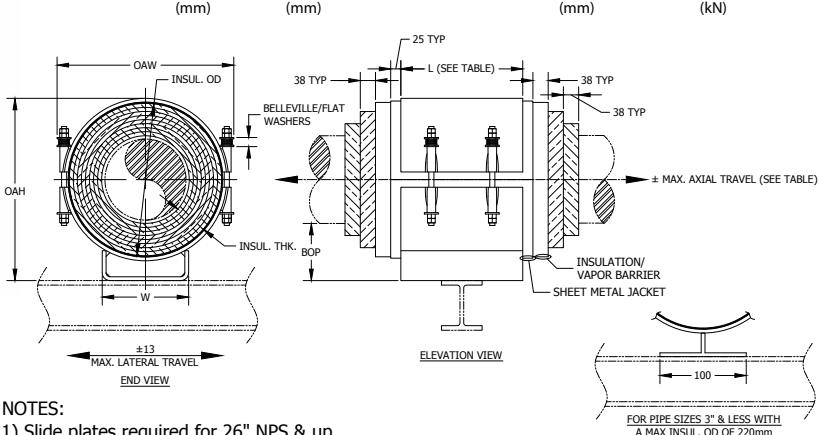
Model No.

Nominal Pipe Size (mm) Insulation Thickness (mm)

BOP (mm)

Support Length (L) (mm)

Vertical Load (kN)



L (mm)*	Max. Axial Travel (mm)	
	Centered	Offset
150	38	76
300	115	230

* L + 150mm for pipe sizes > 42"

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Movements

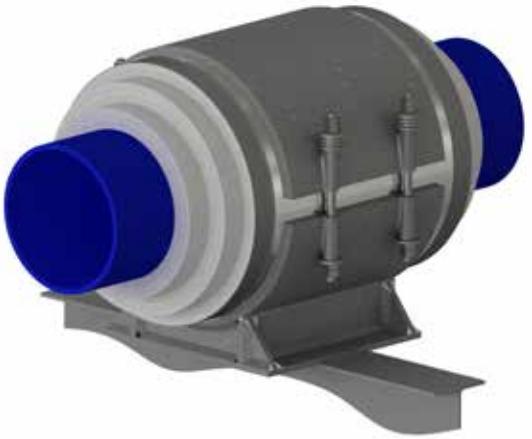
* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

Sizing Chart Cont'd

NOM PIPE SIZE	VERT. LOAD (kN)	INSULATION THICKNESS																			
		60mm				70mm				80mm				90mm				100mm			
		BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																					
1/2"	1.6	100	43	89	140	100	64	114	152	100	84	127	165	100	102	152	178	100	122	165	191
3/4"	2.0	100	48	102	152	100	69	114	165	100	89	140	165	100	107	152	178	100	127	178	191
1"	2.7	100	56	102	152	100	74	127	165	100	94	140	178	100	114	165	191	100	135	178	191
1-1/2"	3.9	100	69	114	165	100	89	140	178	100	109	152	191	100	130	178	203	100	150	203	216
2"	4.8	100	81	127	178	100	102	152	191	100	122	165	203	100	142	191	216	100	163	216	229
2-1/2"	5.8	100	94	140	191	100	114	165	203	100	135	178	216	100	155	203	229	100	175	229	241
3"	7.1	100	109	152	216	100	130	178	216	100	150	203	229	100	170	216	241	100	191	241	254
4"	11	100	135	178	241	100	155	203	241	100	175	229	254	100	196	241	267	100	216	267	279
6"	17	100	191	254	292	100	208	267	305	100	229	292	318	100	249	305	318	100	269	330	330
8"	23	100	241	305	343	100	259	318	356	100	279	343	368	100	300	356	368	100	320	381	381
10"	27	100	295	356	394	100	315	381	406	100	335	394	419	100	353	419	432	100	373	432	432
12"	29	100	345	406	445	100	366	432	457	100	386	445	470	100	404	470	483	100	424	483	483
14"	33	100	376	432	483	100	396	457	495	100	417	483	495	100	437	495	508	100	457	521	521
16"	39	100	427	483	533	100	447	508	546	100	467	533	559	100	488	546	559	100	508	572	622
18"	43	100	478	546	584	100	498	572	597	100	518	597	610	100	538	610	559	635	673	724	
20"	45	100	528	597	635	100	549	622	648	100	569	648	660	100	589	660	660	100	610	686	724
24"	48	100	630	699	737	100	650	724	749	100	671	749	762	100	775	150	711	787	826		
30"	63	100	782	851	889	100	803	876	902	100	823	902	914	100	843	914	978	100	864	940	978
36"	91	100	935	1003	1041	100	955	1029	1054	100	975	1054	1067	100	996	1067	1130	100	1016	1092	1130
42"	138	100	1087	1168	1194	100	1107	1194	1207	100	1128	1207	1219	100	1148	1232	1283	100	1168	1245	1283
48"	154	100	1240	1321	1346	100	1260	1346	1359	100	1280	1359	1372	100	1300	1384	1435	100	1321	1397	1435
56"	180	100	1443	1524	1549	100	1463	1549	1562	100	1483	1562	1575	100	1504	1588	1638	100	1524	1600	1638
60"	193	100	1544	1626	1651	100	1565	1651	1664	100	1585	1664	1676	100	1605	1689	1740	100	1626	1702	1740
66"	212	100	1697	1778	1778	100	1717	1803	1791	100	1737	1816	1803	150	1758	1842	1867	150	1778	1854	1867
72"	231	100	1849	1930	1956	100	1869	1956	1969	100	1890	1969	1981	150	1910	1994	2045	150	1930	2007	2045

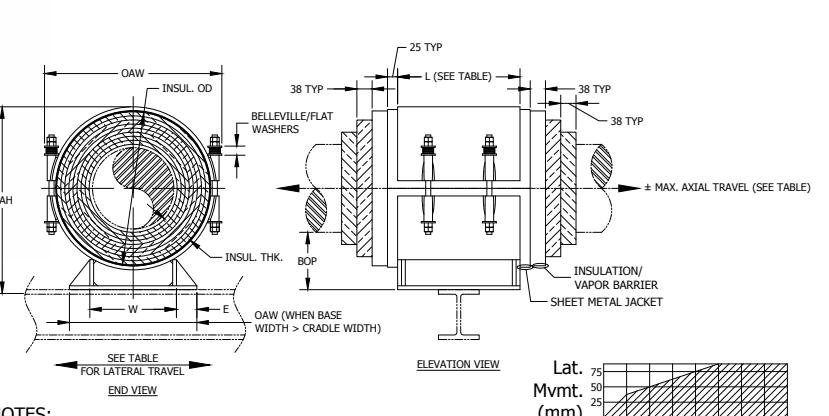
CryoWrap High Lateral Travel Support



DESIGNATION EXAMPLE

CS(H)CW - 8 x 30 - 100 - 300 - 23

Model No. Nominal Pipe Size (mm) Insulation Thickness (mm) BOP (mm) Support Length (L) (mm) Vertical Load (kN)



NOTES:
 1) Slide plates required for 26" NPS & up.
 2) All dimensions in millimeters unless noted.
 *W - Dimension is calculated by multiplying
 (INSULATION OD* 0.55), when base is not a WT
 member.

L (mm)*	Max. Axial Travel (mm)		
	Centered	Offset	Lat. Mvmt. (mm)
150	38	76	50
300	115	230	75

* L + 150mm for pipe sizes > 42"

To Order, Please Specify:
 - Model Number
 - Nominal Pipe Size
 - Insulation Thickness
 - BOP
 - Support Length
 - Vertical Load
 - Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!

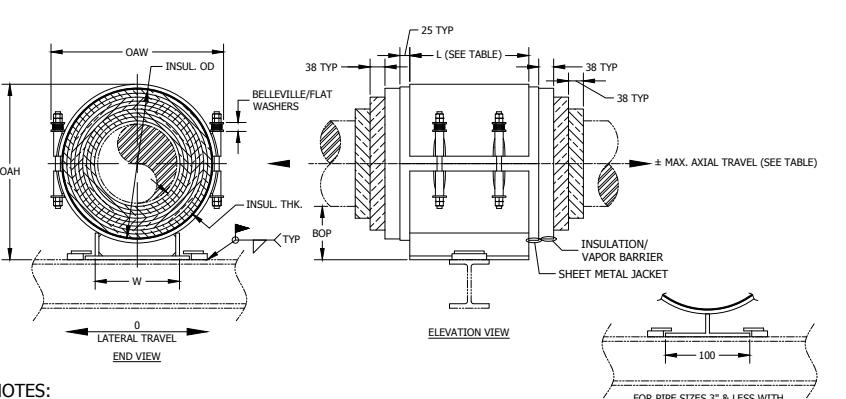
Nominal Pipe Size	Vertical Load (kN)	INSULATION THICKNESS											
		10mm		20mm		30mm		40mm		50mm			
		BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!													
1/2"	1.6	100	43	140	140	100	64	191	152	100	84	216	165
3/4"	2.0	100	48	140	152	100	69	191	165	100	89	216	165
1"	2.7	100	56	140	152	100	74	191	165	100	94	216	178
1-1/2"	3.9	100	69	140	0	100	89	191	0	100	109	216	191
2"	4.8	100	81	140	0	100	102	191	191	100	122	216	203
2-1/2"	5.8	100	94	140	0	100	114	191	203	100	135	216	216
3"	7.1	100	109										

CryoWrap Vertically Restrained Guided Support

DESIGNATION
EXAMPLE**CGCW - 8 x 30 - 100 - 300 - 19 - 6.8**

Model No.

Nominal Pipe Size (mm) Insulation Thickness (mm) BOP (mm) Support Length (L) (mm) Vertical Load (kN) Lateral Load (kN)



Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

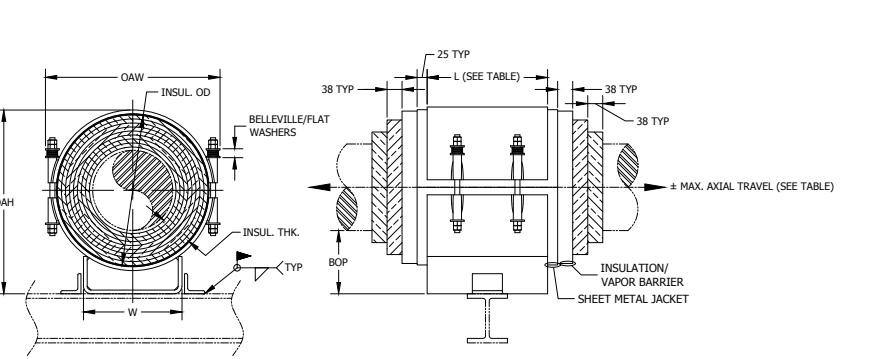
NOM PIPE SIZE	VERT. LOAD (kN)	LAT. LOAD (kN)	INSULATION THICKNESS																			
			10mm				20mm				30mm				40mm				50mm			
			BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)				
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																						
1/2"	1.3	0.5	100	43	152	140	100	64	152	152	100	84	152	165	100	102	152	178	100	122	165	191
3/4"	1.7	0.6	100	48	152	152	100	69	152	165	100	89	152	165	100	107	152	178	100	127	178	191
1"	2.3	0.8	100	56	152	152	100	74	152	165	100	94	152	178	100	114	165	191	100	135	178	191
1-1/2"	3.3	1.2	100	69	152	165	100	89	152	178	100	109	152	191	100	130	178	203	100	150	203	216
2"	4.1	1.5	100	81	152	178	100	102	152	191	100	122	165	203	100	142	191	216	100	163	216	229
2-1/2"	5.0	1.8	100	94	152	191	100	114	165	203	100	135	178	216	100	155	203	229	100	175	229	241
3"	6.0	2.1	100	109	152	216	100	130	178	216	100	150	203	229	100	170	216	241	100	191	241	254
4"	9.5	3.3	100	135	191	241	100	155	203	241	100	175	229	254	100	196	241	267	100	216	279	
6"	14	5.0	100	191	254	292	100	208	267	305	100	229	292	318	100	249	305	336	100	269	330	
8"	19	6.8	100	241	305	343	100	259	318	356	100	279	343	368	100	300	356	381	100	320	381	
10"	23	7.9	100	295	356	394	100	315	381	406	100	335	394	419	100	353	419	432	100	373	432	
12"	25	8.7	100	345	406	445	100	366	432	457	100	386	445	470	100	404	470	483	100	424	483	
14"	28	9.9	100	376	432	483	100	396	457	495	100	417	483	508	100	437	495	521	100	457	521	
16"	33	12	100	427	483	533	100	447	508	546	100	467	533	559	100	488	546	569	100	508	572	
18"	36	13	100	478	546	584	100	498	572	600	100	518	597	610	100	538	610	630	100	559	635	
20"	39	14	100	528	597	635	100	549	622	648	100	569	660	686	100	600	686	724	100	626	724	
24"	41	14	100	630	699	737	100	650	724	749	100	671	749	762	100	691	762	787	100	711	826	
30"	53	19	100	782	851	889	100	803	876	902	100	823	902	914	100	843	914	978	100	864	940	
36"	77	27	100	935	1003	1041	100	955	1029	1054	100	975	1054	1067	1130	150	1016	1092	1130			
42"	117	41	100	1087	1168	1194	100	1107	1194	1207	100	1128	1207	1219	150	1148	1232	1283				
48"	131	46	100	1240	1321	1346	100	1260	1346	1359	100	1280	1359	1372	150	1300	1384	1435				
56"	153	53	100	1443	1524	1549	100	1463	1549	1562	100	1483	1562	1575	150	1504	1588	1638				
60"	164	57	100	1544	1626	1651	100	1565	1651	1664	100	1585	1664	1676	150	1605	1689	1740	150	1626	1740	
66"	180	63	100	1697	1778	1778	100	1717	1803	1791	100	1737	1816	1803	150	1758	1842	1867	150	1778	1854	
72"	197	69	100	1849	1930	1956	100	1869	1956	1969	100	1890	1969	1981	150	1910	1994	2045	150	1930	2045	

NOM PIPE SIZE	VERT. LOAD (kN)	LAT. LOAD (kN)	INSULATION THICKNESS																			
			60mm				70mm				80mm				90mm				100mm			
			BOP (mm)	INSUL. OD (mm																		

CryoWrap Guided Support

DESIGNATION
EXAMPLE**CG(L)CW - 8 x 30 - 100 - 300 - 19 - 9.7**

Model No.

Nominal Pipe Size (mm)
Insulation Thickness (mm)
BOP (mm)Support Length (L) (mm)
Vertical Load (kN)
Lateral Load (kN)

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Movements

* See last page of this document for new designation model number construction.

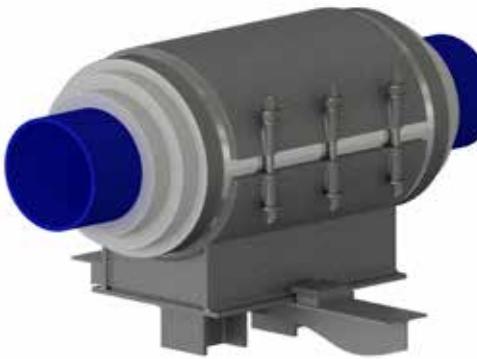
** Information presented on this page subject to change without notice.

NOM PIPE SIZE	VERT. LOAD (kN)	LAT. LOAD (kN)	INSULATION THICKNESS																				
			10mm				20mm				30mm				40mm								
			BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)					
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																							
1/2"	1.3	0.7	x	x	x	x	x	x	x	x	x	x	x	x	100	102	178	178	100	122	191	191	
3/4"	1.7	0.9	x	x	x	x	x	x	x	x	x	x	x	x	100	107	178	178	100	127	191	191	
1"	2.3	1.1	x	x	x	x	x	x	x	x	x	x	x	x	100	114	178	191	100	135	191	191	
1-1/2"	3.3	1.6	x	x	x	x	x	x	x	x	x	x	x	x	100	109	178	191	100	130	191	203	
2"	4.1	2.1	x	x	x	x	100	102	178	191	100	122	191	203	100	142	203	216	100	163	216	229	
2-1/2"	5.0	2.5	x	x	x	x	100	100	114	178	203	100	135	191	216	100	155	203	229	100	175	229	241
3"	6.0	3.0	100	109	178	216	100	130	191	216	100	150	203	229	100	170	216	241	100	191	241	254	
4"	9.5	4.7	100	135	191	241	100	155	203	241	100	175	229	254	100	196	241	267	100	216	267	279	
6"	14	7.2	100	191	279	292	100	208	292	305	100	229	305	318	100	249	318	318	100	269	330	330	
8"	19	9.7	100	241	318	343	100	259	330	356	100	279	343	368	100	300	356	368	100	320	381	381	
10"	23	11	100	295	406	394	100	315	419	406	100	335	432	419	100	353	445	432	100	373	457	432	
12"	25	12	100	345	432	445	100	366	445	457	100	386	457	470	100	404	470	483	100	424	483	483	
14"	28	14	100	376	457	483	100	396	470	495	100	417	483	495	100	437	495	508	100	457	521	521	
16"	33	16	100	427	483	533	100	447	508	546	100	467	533	559	100	488	546	559	150	508	572	622	
18"	36	18	100	478	546	584	100	498	572	597	100	518	597	610	100	538	610	610	150	559	635	673	
20"	39	19	100	528	597	635	100	549	622	648	100	569	648	660	100	589	660	660	150	610	686	724	
24"	41	20	100	630	699	737	100	650	724	749	100	671	749	762	100	691	762	775	150	711	787	826	
30"	53	27	100	782	851	889	100	803	876	902	100	823	902	914	150	843	914	978	150	864	940	978	
36"	77	39	100	935	1003	1041	100	955	1029	1054	100	975	1054	1067	150	996	1067	1130	150	1016	1092	1130	
42"	117	59	100	1087	1168	1194	100	1107	1194	1207	100	1128	1207	1219	150	1148	1232	1283	150	1168	1245	1283	
48"	131	65	100	1240	1321	1346	100	1260	1346	1359	100	1280	1359	1372	150	1300	1384	1435	150	1321	1397	1435	
56"	153	76	100	1443	1524	1549	100	1463	1549	1562	100	1483	1562	1575	150	1504	1588	1638	150	1524	1600	1638	
60"	164	82	100	1544	1626	1651	100	1565	1651	1664	100	1585	1664	1676	150	1605	1689	1740	150	1626	1702	1740	
66"	180	90	100	1697	1778	1778	100	1717	1803	1791	100	1737	1816	1803	150	1758	1842	1867	150	1778	1854	1867	
72"	197	98	100	1849	1930	1956	100	1869	1956	1969	100	1890	1969	1981	150	1910	1994	2045	150	1930	2007	2045	

Sizing Chart Cont'd

PIPE SIZE	VERT. LOAD (lbs)	LAT. LOAD (lbs)	INSULATION THICKNESS															
			60mm			70mm			80mm			90mm			100mm</th			

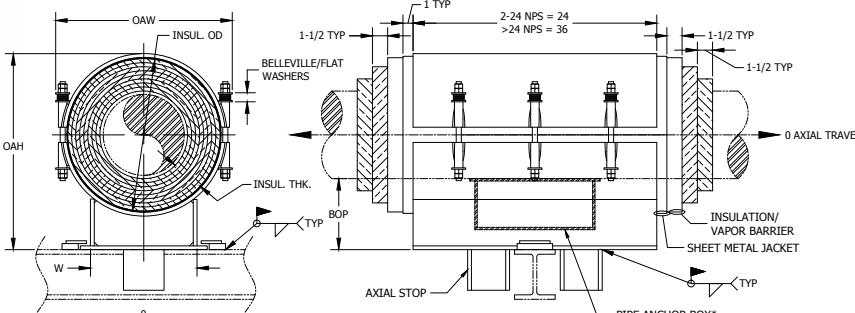
CryoWrap Anchored Support



DESIGNATION EXAMPLE

CACW - 8 x 30 - 150 - 600 - 19 - 6.8 - 8.3

Model No. Nominal Pipe Size (mm) Insulation Thickness (mm) BOP (mm) Support Length (L) (mm) Vertical Load (kN) Lateral Load (kN) Axial Load (kN)



Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Axial Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

- NOTES:
 1) All dimensions in inches unless noted.
 * - Pipe anchor box to be compatible with process pipe material.
 *W - Dimension is calculated by multiplying
 (INSULATION OD* 0.85).

NOM PIPE SIZE	VERT. LOAD (lbs)	LAT. LOAD (lbs)	AXI. LOAD (lbs)	INSULATION THICKNESS																			
				60mm			70mm			80mm			90mm			100mm							
BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)				
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																							
1"	2.3	0.8	2.4	100	56	152	152	100	74	191	165	100	94	216	178	100	114	241	191	100	135	267	191
1-1/2"	3.3	1.2	2.4	100	69	165	165	100	89	191	178	100	109	216	191	100	130	241	203	100	150	267	216
2"	4.1	1.5	2.4	100	81	165	178	100	102	191	191	100	122	216	203	100	142	241	216	100	163	267	229
2-1/2"	5.0	1.8	3.4	100	94	178	191	100	114	203	203	100	135	216	216	100	155	241	229	100	175	267	241
3"	6.0	2.1	2.9	100	109	191	216	100	130	216	216	100	150	229	229	100	170	241	241	100	191	267	254
4"	9.5	3.3	3.4	100	135	216	241	100	155	229	241	100	175	254	254	100	196	267	267	100	216	279	279
6"	14	5.0	6.7	100	191	267	292	100	208	279	305	100	229	292	318	100	249	318	318	100	269	330	330
8"	19	6.8	8.3	100	241	305	343	100	259	318	356	100	279	343	368	100	300	356	368	100	320	381	381
10"	23	7.9	11	100	295	356	394	100	315	381	406	100	335	394	419	100	353	419	432	100	373	432	432
12"	25	8.7	20	100	345	406	445	100	366	432	457	100	386	445	470	100	404	470	483	100	424	483	483
14"	28	9.9	21	100	376	432	483	100	396	457	495	100	417	483	495	100	437	495	508	100	457	521	521
16"	33	12	22	100	427	483	533	100	447	508	546	100	467	533	559	100	488	546	559	100	508	572	622
18"	36	13	24	100	478	546	584	100	498	572	597	100	518	597	610	100	538	610	610	100	559	635	673
20"	39	14	27	100	528	597	635	100	549	622	648	100	569	648	660	100	589	660	660	100	610	686	724
24"	41	14	57	100	630	699	737	100	650	724	749	100	671	749	762	100	691	762	775	100	711	787	826
30"	53	19	71	100	782	851	889	100	803	876	902	100	823	902	914	100	843	914	978	100	864	940	978
36"	77	27	84	100	935	1003	1041	100	955	1029	1054	100	975	1054	1067	100	996	1067	1130	100	1016	1092	1130
42"	117	41	97	100	1087	1168	1194	100	1107	1194	1207	100	1128	1207	1219	100	1148	1232	1283	100	1168	1245	1283
48"	131	46	101	100	1240	1321	1346	100	1260	1346	1359	100	1280	1359	1372	100	1300	1384	1435	100	1321	1397	1435
56"	153	53	113	100	1443	1524	1549	100	1463	1549	1562	100	1483	1562	1575	100	1504	1588	1638	100	1524	1600	1638
60"	164	57	116	100	1544	1626	1651	100	1565	1651	1664	100	1585	1664	1676	100	1605	1689	1740	100	1626	1702	1740
66"	180	63	118	100	1697	1778	1778	100	1717	1803	1791	100	1737	1816	1803	150	1758	1842	1867	150	1778	1854	1867
72"	197	69	119	100	1849	1930	1956	100	1869	1956	1969	100	1890	1969	1981	150	1910	1994	2045	150	1930	2007	2045

CryoWrap Hanging Support



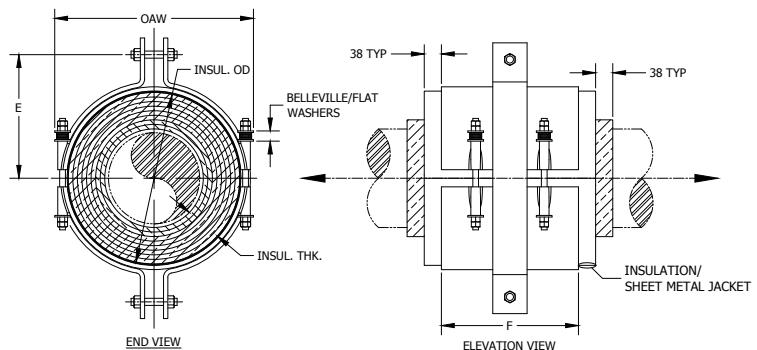
DESIGNATION EXAMPLE

CHCW - 8 x 30 - 229 - 5.3

Model No.

Nominal Pipe Size (mm) Insulation Thickness (mm)

Support Length (F) (mm) Vertical Load (kN)

**Ordering Instructions:**

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Support Length
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

NOM PIPE SIZE	VERT. LOAD (kN)	INSULATION THICKNESS														
		10mm			20mm			30mm			40mm			50mm		
INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)		
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																
1"	0.3	56	229	102	74	229	191	94	229	216	114	229	241	135	229	267
1-1/2"	0.4	69	229	114	89	229	191	109	229	216	130	229	241	150	229	267
2"	0.6	81	229	127	102	229	191	122	229	216	142	229	241	163	229	267
2-1/2"	0.9	94	229	140	114	229	203	135	229	216	155	229	241	175	229	267
3"	1.0	109	229	191	130	229	216	150	229	229	170	229	241	191	229	267
4"	1.4	135	229	254	155	229	267	175	229	292	196	229	305	216	229	330
6"	3.0	191	229	305	208	229	318	229	229	343	249	229	356	269	229	381
8"	5.3	241	229	356	259	229	381	279	229	394	300	229	419	320	229	432
10"	6.9	295	229	406	315	229	432	335	229	445	353	229	470	373	229	483
12"	13	345	305	432	366	305	457	386	305	483	404	305	495	424	305	521
14"	15	376	305	483	396	305	508	417	305	533	437	305	546	457	305	572
16"	17	427	305	546	447	305	572	467	305	597	488	305	610	508	305	635
18"	19	478	305	597	498	305	622	518	305	648	538	305	660	559	305	686
20"	21	528	305	699	549	305	724	569	305	749	589	305	762	610	305	787
24"	39	630	381	851	650	381	876	671	381	902	691	381	914	711	381	940
30"	49	782	381	1003	803	381	1029	823	381	1054	843	381	1067	864	381	1092
36"	59	935	381	1168	955	381	1194	975	381	1207	996	381	1232	1016	381	1245
42"	69	1087	381	1321	1107	381	1346	1128	381	1359	1148	381	1384	1168	381	1397

Sizing Chart Cont'd

NOM PIPE SIZE	VERT. LOAD (kN)	INSULATION THICKNESS														
		60mm			70mm			80mm			90mm			100mm		
INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)		
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																
1"	0.3	155	229	318	175	229	318	196	229	318	216	229	318	234	229	318
1-1/2"	0.4	170	229	318	191	229	318	208	229	318	229	229	318	249	229	318
2"	0.6	180	229	318	201	229	318	221	229	318	241	229	318	262	229	330
2-1/2"	0.9	193	229	318	213	229	318	234	229	318	254	229	318	274	229	343
3"	1.0	211	229	318	231	229	318	249	229	318	269	229	343	290	229	368
4"	1.4	236	229	356	257	229	368	274	229	394	295	229	406	315	229	432
6"	3.0	290	229	406	310	229	419	330	229	445	351	229	457	368	229	483
8"	5.3	340	229	457	361	229	470	381	229	495	401	229	521	419	229	533
10"	6.9	394	229	508	414	229	521	434	229	546	455	229	572	475	205	584
12"	13	445	305	533	465	305	559	485	305	572	505	305	597	526	305	622
14"	15	478	305	584	498	305	610	516	305	622	536	305	648	556	305	673
16"	17	528	305	648	549	305	673	566	305	686	587	305	711	607	305	737
18"	19	579	305	699	599	305	724	617	305	737	638	305	762	658	305	787
20"	21	630	305	800	650	305	826	668	305	838	688	305	864	709	305	889
24"	39	732	381	953	752	381	978	770	381	991	790	381	1016	810	381	1041
30"	49	884	381													

PyroWrap

METRIC

RILCO PyroWrap™ for High Temperatures

Service Temperature Ranges: -40°F (-40°C) to 1200°F (650°C)

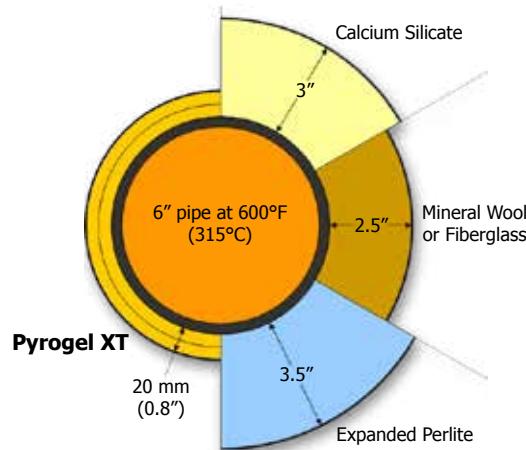


Physical Properties

Thicknesses*	0.20 in (5 mm)	0.40 in (10 mm)
Material Form*	60 in (1,500 mm) wide x 260 ft (80 m) long rolls	60 in (1,500 mm) wide x 155 ft (47 m) long rolls
Max. Use Temp.	1200°F (650°C)	
Density*	11 lb/ft³ (0.18 g/cc)	
Hydrophobic	Yes	



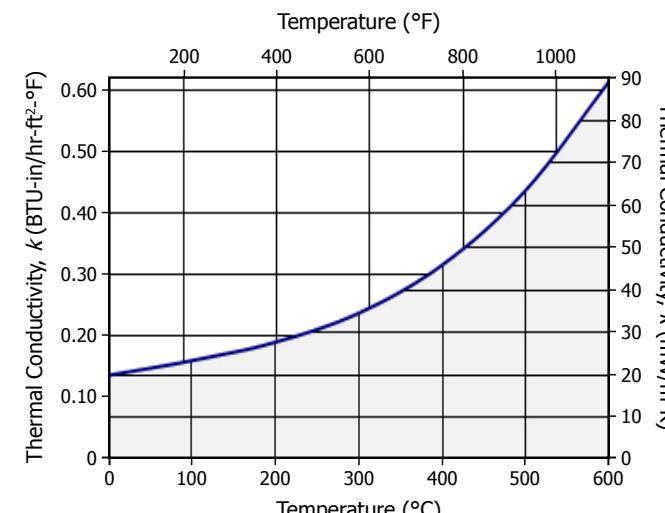
PyroWrap™ pipe supports utilize Aspen Aerogel's Pyrogel™ XT or Pyrogel™ XTF (fire protection grade) comprised of a silica aerogel blanket reinforced with non-woven glass-fiber batting. They are specifically engineered with 50% to 80% less thickness, making them substantially lighter in weight, thereby easing the installation process and reducing its associated cost.



All four designs provide same level of thermal efficiency

Thermal Conductivity[†]

ASTM C 177 Results



Mean Temp.	0	100	200	300	400	500	600
°C	32	212	392	572	752	932	1112
mW/m-K	20	23	28	35	46	64	89
BTU-in/hr-ft²-°F	0.14	0.16	0.19	0.24	0.32	0.44	0.62

[†]Thermal conductivity measurements taken at a compressive load of 2 psi.

Comparable Insulation Ratings



PyroWrap™

Cal-Sil

METRIC

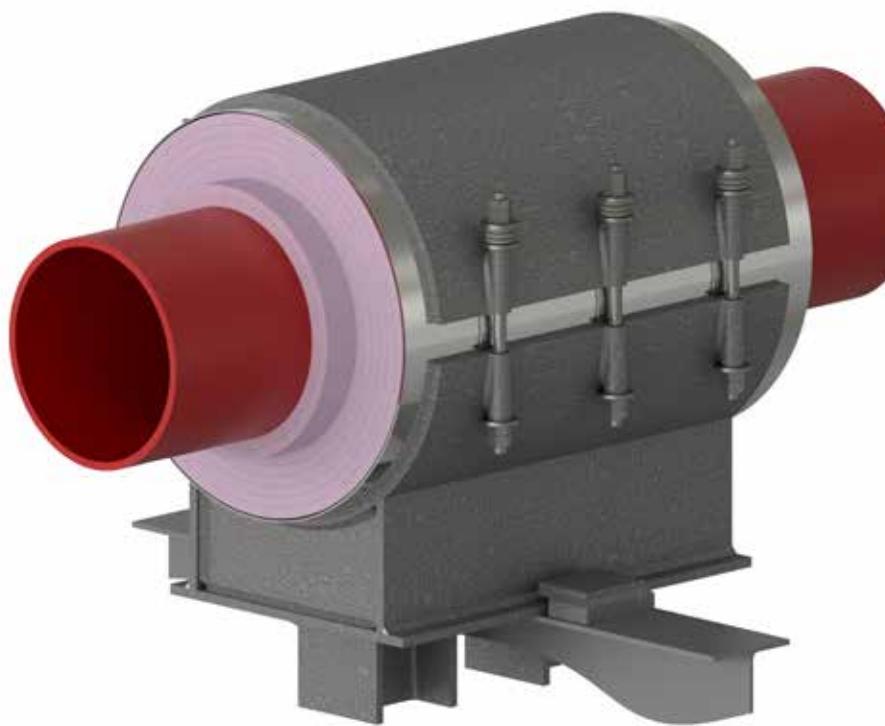
RILCO PyroWrap™ - Properties**Service Temperature Ranges: -40°F (-40°C) to 1200°F (650°C)**M
E
T
R
I
C

Thermal Performance: PyroWrap™ pipe supports are the most efficient products available in the world for high temperature applications. They are 2-5 times thinner than other products with comparable thermal ratings.

Moisture Resistance: PyroWrap™ pipe supports are hydrophobic over the entire matrix of the insulation, not just the surface. The unique hydrophobic characteristic of Pyrogel™ insulation not only repels liquid water, but allows vapor to pass through the insulation and wick moisture away from the pipe, helping to prevent corrosion and deterioration of the substrate.

Structural Integrity: PyroWrap™ pipe supports provide superior structural integrity in comparison to other products commonly used in high temperature applications. PyroWrap™ systems design permits for the "modularization" of the pipe which then gives the option for the support systems and insulation to be pre-installed off-site, or on-site at a safe location.

Dimensional Stability: PyroWrap™ pipe supports allow minimal movement of the insulated system, yet remain flexible and experience no thermal shock. This design allows the usual issues of degraded insulation caused by contraction, extreme stress, structural damage and crack propagation problems encountered with standard insulation mediums to no longer be a concern.



Anchored Support Shown



Resting Support



Vertically Restrained Guided Support



Anchored Support



High Lateral Travel Support



Guided Support



Hanging Support

Applications & Features:

- Temperature range to -40 Deg C to 650 Deg C
- Higher temperature applications available
- Teflon®/2B SS 304 slide plates on shoe
- Design loads based on a safety factor of 5
- A36 steel construction
- See technical specification RCS-750
- Test results available upon request
- Steel finish available in galvanized finish or painted
- Increased loading capability available. Contact Rilco for additional information
- Support constructed in accordance with ASME B31.1, B31.3 and MSS-SP58
- A307 or A193 B7 plated bolts/studs
- Patented anchor system allows increased load carrying and decreased heat transfer (Anchored Support)

For special applications or for information on other insulation thicknesses or pipe sizes, please contact us!

M
E
T
R
I
C

PyroWrap High Lateral Travel Support



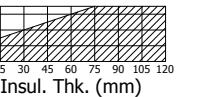
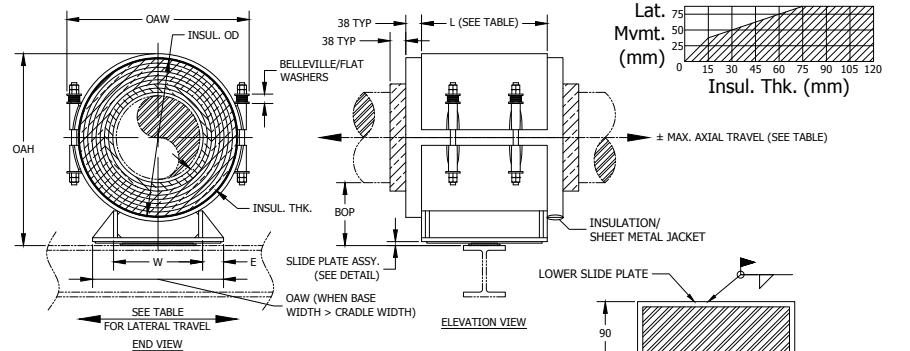
DESIGNATION EXAMPLE

HS(H)PW - 8 x 30 - 100 - 300 - 23

Model No.

Nominal Pipe Size (mm) Insulation Thickness (mm) BOP (mm)

Support Length (L) (mm) Vertical Load (kN)

**Ordering Instructions:**

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

NOTES:

1) All dimensions in millimeters unless noted.

*W - Dimension is calculated by multiplying (INSULATION OD * 0.55), when base is not a WT member.

L (mm)*	Max. Axial Travel (mm)	
	Centered	Offset
150	38	76
300	115	230

* L + 150mm for pipe sizes > 42"

NOM PIPE SIZE	LOW VERT. LOAD (kN)	HIGH VERT. LOAD (kN)	INSULATION THICKNESS																			
			60mm					70mm					80mm					90mm				
			BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)				
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																						
1/2"	0.6	2.4	100	43	89	140	100	64	114	152	100	84	127	165	100	102	152	178	100	122	165	191
3/4"	0.8	3.1	100	48	102	152	100	69	114	165	100	89	140	165	100	107	152	178	100	127	178	191
1"	1.0	4.0	100	56	102	152	100	74	127	165	100	94	140	178	100	114	165	191	100	135	178	191
1-1/2"	1.4	5.8	100	69	114	0	100	89	140	0	100	109	152	191	100	130	178	203	100	150	203	216
2"	1.7	6.7	100	81	127	0	100	102	152	191	100	122	165	203	100	142	191	216	100	163	216	229
2-1/2"	2.0	8.0	100	94	140	0	100	114	165	203	100	135	178	216	100	155	203	229	100	175	229	241
3"	2.4	9.3	100	109	152	216	100	130	178	216	100	150	203	229	100	170	216	241	100	191	241	254
4"	3.7	15	100	135	178	241	100	155	203	241	100	175	229	254	100	196	241	267	100	216	267	279
6"	5.7	23	100	191	254	292	100	208	267	305	100	249	305	318	100	269	330	330	100	330	330	330
8"	7.6	30	100	241	305	343	100	259	318	356	100	279	343	368	100	306	320	381	100	381	381	381
10"	8.9	36	100	295	356	394	100	315	381	406	100	335	419	439	100	373	432	432	100	406	406	406
12"	9.8	39	100	345	406	445	100	366	432	457	100	386	445	470	100	404	470	483	100	424	483	483
14"	11	44	100	376	432	483	100	396	457	495	100	417	483	495	100	437	495	508	100	457	521	521
16"	13	52	100	427	483	533	100	447	508	546	100	467	533	559	100	488	546	559	100	508	572	622
18"	14	57	100	478	546	584	100	498	572	597	100	518	597	610	100	538	610	610	100	559	635	673
20"	15	60	100	528	597	635	100	549	622	648	100	569	648	660	100	589	660	660	100	610	686	724
24"	16	64	100	630	699	737	100	650	724	749	100	671	749	762	100	775	775	775	100	787	826	828
30"	21	84	100	782	851	889	100	803	876	902	100	823	902	914	100	843	914	978	100	864	940	978
36"	24	98	100	935	1003	1041	100	955	1029	1054	100	975	1054	1067	100	996	1067	1130	100	1016	1092	1130
42"	28	110	100	1087	1168	1194	100	1107	1194	1207	100	1128	1207	1219	100	1148	1232	1283	100	1168	1245	1283
48"	32	126	100	1240	1321	1346	100	1260	1346	1359	100	1280	1359	1372	100	1300	1384	1435	100	1321	1397	1435
56"	37	147	100	1443	1524	1549	100	1463	1549	1562	100	1483	1562	1575	100	1504	1588	1638	100	1524	1600	1638
60"	40	158	100	1544	1626	1651	100	1565	1651	1664	100	1585	1664	1676	100	1605	1689	1740	100	1626	1702	1740
66"	44	173	100	1697	1778	1778	100	1717	1803	1791	100	1737	1816	1803	150	1758	1842	1867	150	1778	1854	1867
72"	48	189	100	1849	1930	1956	100	1869	1956	1969	100	1890	1969	1981	150	1910	1994	2045	150	1930	2007	2045

Sizing Chart Cont'd

PyroWrap Guided Support

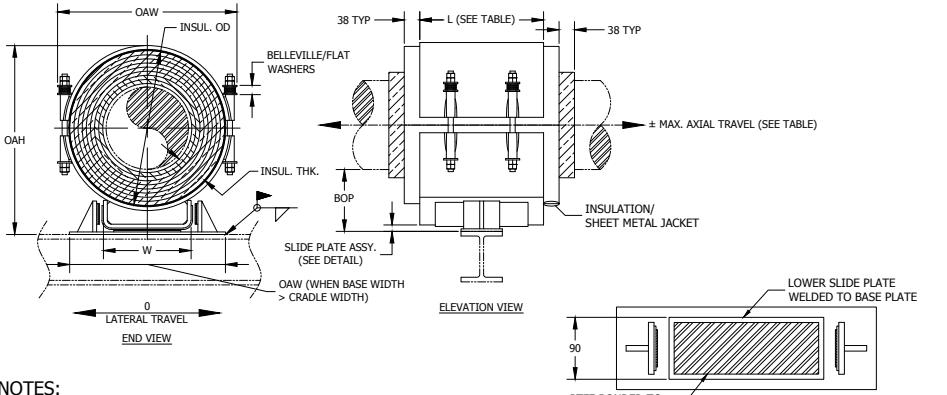


**DESIGNATION
EXAMPLE**

HG(L)PW - 8 x 30 - 100 - 300 - 7.6 - 3.8

Model No.	Nominal	Insulation	BOP	Support	Vertical	Lateral
-----------	---------	------------	-----	---------	----------	---------

Model No.	Nominal Pipe Size (mm)	Insulation Thickness (mm)	BCI (mm)	Support Length (L) (mm)	Vertical Load (kN)	Editorial Load (kN)
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Ordering Instructions:

To Order, Please Specify:

- Model Number
 - Nominal Pipe Size
 - Insulation Thickness
 - BOP
 - Support Length
 - Vertical Load
 - Lateral Load
 - Movements

* See last page of this document for new designation model number construction.

**** Information presented on this page subject to change without notice.**

NOTES:
1) All dimensions in millimeters unless noted.
*W - Dimension is calculated by multiplying

mm)*	Max. Axial Travel (mm)	
	Centered	Offset
50	38	76
00	115	230

- 150mm for pipe sizes > 42"

Sizing Chart Cont'd

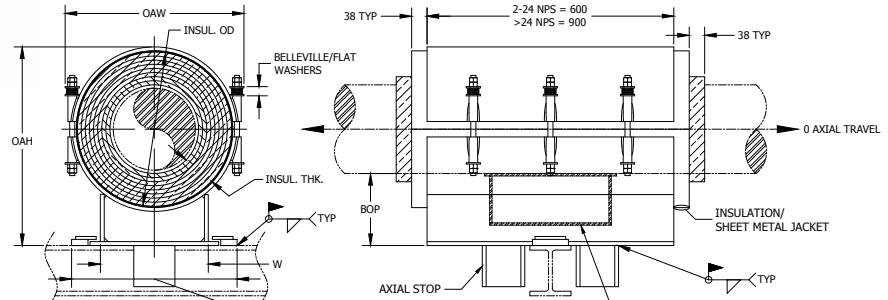
Nom Pipe Size	Low Load Option		High Load Option		Insulation Thickness																			
					60mm				70mm				80mm				90mm				100mm			
	Vert. (kN)	Lat. (kN)	Vert. (kN)	Lat. (kN)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																								
1/2"	0.6	0.3	2.4	1.2	100	142	203	191	150	163	216	254	150	183	229	267	150	203	254	279	150	224	267	292
3/4"	0.8	0.4	3.1	1.6	100	147	203	203	150	168	216	267	150	188	241	267	150	208	254	279	150	229	279	292
1"	1.0	0.5	4.0	2.0	100	155	203	203	150	175	229	267	150	196	241	279	150	216	267	292	150	234	279	292
1-1/2"	1.4	0.7	5.8	2.9	100	170	216	216	150	191	241	279	150	208	254	292	150	229	279	305	150	249	292	318
2"	1.7	0.8	6.7	3.3	100	180	229	229	150	201	254	292	150	221	267	305	150	241	292	318	150	262	305	330
2-1/2"	2.0	1.0	8.0	4.0	100	193	241	241	150	213	267	305	150	234	279	318	150	254	305	330	150	274	318	343
3"	2.4	1.2	9.3	4.7	100	211	254	267	150	231	279	318	150	249	292	330	150	269	318	343	150	290	343	350
4"	3.7	1.9	15	7.5	100	236	279	292	150	257	305	343	150	274	318	356	150	295	343	368	150	315	368	383
6"	5.7	2.8	23	11	100	290	356	343	150	310	368	406	150	330	394	419	150	351	406	419	150	368	432	432
8"	7.6	3.8	30	15	150	340	406	445	150	361	419	457	150	381	445	470	150	401	457	470	200	419	483	533
10"	8.9	4.4	36	18	150	394	470	495	150	414	483	508	150	434	495	521	150	455	521	533	200	475	533	584
12"	9.8	4.9	39	20	150	445	508	546	150	465	521	559	150	485	546	572	150	505	572	584	200	526	584	635
14"	11	5.6	44	22	150	478	533	584	150	498	559	597	150	516	572	597	150	536	597	610	200	556	622	673
16"	13	6.4	52	26	150	528	584	635	150	549	610	648	150	566	622	660	200	587	648	711	200	607	673	724
18"	14	7.1	57	28	150	579	648	686	150	599	673	699	150	617	686	711	200	638	711	762	200	658	737	775
20"	15	7.6	60	30	150	630	699	737	150	650	724	749	150	668	737	762	200	688	762	813	200	709	787	826
24"	16	8.0	64	32	150	732	800	838	150	752	826	851	150	770	838	864	200	790	864	927	200	810	889	927
30"	21	10	84	42	150	884	953	991	150	904	978	1003	200	922	991	1067	200	942	1016	1080	200	963	1041	1081
36"	24	12	98	49	150	1036	1105	1143	150	1057	1130	1156	200	1074	1143	1219	200	1095	1168	1232	200	1115	1194	1234
42"	28	14	110	55	150	1189	1270	1295	150	1209	1295	1308	200	1227	1308	1372	200	1247	1334	1384	200	1267	1346	1384
48"	32	16	126	63	150	1341	1422	1448	150	1361	1448	1461	200	1379	1461	1524	200	1400	1486	1537	200	1420	1499	1537
56"	37	18	147	74	150	1544	1626	1651	150	1565	1651	1664	200	1582	1664	1727	200	1603	1689	1740	200	1623	1702	1744
60"	40	20	158	79	150	1646	1727	1753	150	1666	1753	1765	200	1684	1765	1829	200	1704	1791	1842	200	1725	1803	1842
66"	44	22	173	87	150	1798	1880	1880	150	1819	1905	1892	200	1836	1918	1956	200	1857	1943	1969	200	1877	1956	1967
72"	48	24	189	95	150	1951	2032	2057	150	1971	2057	2070	200	1989	2070	2134	200	2009	2096	2146	200	2029	2108	2146

Nom Pipe Size	Low Load Option		High Load Option		Insulation Thickness																			
					10mm				20mm				30mm				40mm				50mm			
	Vert. (kN)	Lat. (kN)	Vert. (kN)	Lat. (kN)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																								
1/2"	0.6	0.3	2.4	1.2	x	x	x	x	x	x	x	x	x	x	x	x	100	102	178	178	100	122	191	191
3/4"	0.8	0.4	3.1	1.6	x	x	x	x	x	x	x	x	x	x	x	x	100	107	178	178	100	127	191	191
1"	1.0	0.5	4.0	2.0	x	x	x	x	x	x	x	x	x	x	x	x	100	114	178	191	100	135	191	191
1-1/2"	1.4	0.7	5.8	2.9	x	x	x	x	x	x	x	x	100	109	178	191	100	130	191	203	100	150	203	216
2"	1.7	0.8	6.7	3.3	x	x	x	x	100	102	178	191	100	122	191	203	100	142	203	216	100	163	216	229
2-1/2"	2.0	1.0	8.0	4.0	x	x	x	x	100	114	178	203	100	135	191	216	100	155	203	229	100	175	229	241
3"	2.4	1.2	9.3	4.7	100	109	178	216	100	130	191	216	100	150	203	229	100	170	216	241	100	191	241	254
4"	3.7	1.9	15	7.5	100	135	191	241	100	155	203	241	100	175	229	254	100	196	241	267	100	216	267	279
6"	5.7	2.8	23	11	100	191	279	292	100	208	292	305	100	229	305	318	100	249	318	318	100	269	330	330
8"	7.6	3.8	30	15	100	241	318	343	100	259	330	356	100	279	343	368	100	300	356	368	100	320	381	381
10"	8.9	4.4	36	18	100	295	406	394	100	315	419	406	100	335	432	419	100	353	445	432	100	373	457	432
12"	9.8	4.9	39	20	100	345	432	445	100	366	445	457	100	386	457	470	100	404	470	483	100	424	483	483
14"	11	5.6	44	22	100	376	457	483	100	396	470	495	100	417	483	495	100	437	495	508	100	457	521	521
16"	13	6.4	52	26	100	427	483	533	100	447	508	546	100	467	533	559	100	488	546	559	150	508	572	622
18"	14	7.1	57	28	100	478	546	584	100	498	572	597	100	518	597	610	100	538	610	610	150	559	635	673
20"	15	7.6	60	30	100	528	597	635	100	549	622	648	100	569	648	660	100	589	660	660	150	610	686	724
24"	16	8.0	64	32	100	630	699	737	100	650	724	749	100	671	749	762	100	691	762	775	150	711	787	826
30"	21	10	84	42	100	782	851	889	100	803	876	902	100	823	902	914	150	843	914	978	150	864	940	978
36"	24	12	98	49	100	935	1003	1041	100	955	1029	1054	100	975	1054	1067	150	996	1067	1130	150	1016	1092	1130
42"	28	14	110	55	100	1087	1168	1194	100	1107	1194	1207	100	1128	1207	1219	150	1148	1232	1283	150	1168	1245	1283
48"	32	16	126	63	100	1240	1321	1346	100	1260	1346	1359	100	1280	1359	1372	150	1300	1384	1435	150	1321	1397	1435
56"	37	18	147	74	100	1443	1524	1549	100	1463	1549	1562	100	1483	1562	1575	150	1504	1588	1638	150	1524	1600	1638
60"	40	20	158	79	100	1544	1626	1651	100	1565	1651	1664	100	1585	1664	1676	150	1605	1689	1740	150	1626	1702	1740
66"	44	22	173	87	100	1697	1778	1778	100	1717	1803	1791	100	1737	1816	1803	150	1758	1842	1867	150	1778	1854	1867
72"	48	24	189	95	100	1849	1930	1956	100	1869	1956	1969	100	1890	1969	1981	150	1910	1994	2045	150	1930	2007	2045

Nom Pipe Size	Low Load Option		High Load Option		Insulation Thickness																			
					110mm				120mm				130mm				140mm				150mm			
	Vert. (kN)	Lat. (kN)	Vert. (kN)	Lat. (kN)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	Insul. OD (mm)	OAW (mm)	OAH (mm)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																								
1/2"	0.6	0.3	2.4	1.2	200	244	292	343	200	262	305	356	200	282	330	368	200	302	356	381	250	323	368	431
3/4"	0.8	0.4	3.1	1.6	200	249	292	356	200	267	318	356	200	287	330	368	200	307	356	381	250	328	381	441
1"	1.0	0.5	4.0	2.0	200	254	305	356	200	274	318	368	200	295	343	381	200	315	368	394	250	335	381	441
1-1/2"	1.4	0.7	5.8	2.9	200	269	318	368	200	290	343	381	200	310	356	394	200	330	381	406	250	351	394	471
2"	1.7	0.8	6.7	3.3	200	282	330	381	200	302	356	394	200	323	368	406	200	340	394	419	250	361	406	471
2-1/2"	2.0	1.0	8.0	4.0	200	295	343	394	200	315	368	406	200	335	381	419	200	353	406	432	250	373	419	481
3"	2.4	1.2	9.3	4.7	200	310	356	419	200	330	381	419	200	351	394	432	200	371	419	445	250	391	445	501
4"	3.7	1.9	15	7.5	200	335	381	445	200	356	406	445	200	376	419	457	200	396	445	470	250	417	470	531
6"	5.7	2.8	23	11	200	389	445	495	200	409	470	508	200	429	495	521	200	450	508	521	250	470	533	581
8"	7.6	3.8	30	15	200	439	495	546	200	460	521	559	200	480	546	572	250	500	559	622	250	521	584	631
10"	8.9	4.4	36	18	200	495	559	597	200	513	572	610	200	533	597	622	250	554	610	686	250	574	635	681
12"	9.8	4.9	39	20	200	546	610	648	200	564	622	660	200	584	648	673	250	605	660	737	250	625	686	731
14"	11	5.6	44	22	200	577	635	686	200	597	660	686	200	617	673	699	250	638	699	762	250	658	724	771
16"	13	6.4	52	26	200	627	686	737	200	648	711	749	250	668	724	813	250	688	749	813	250	709	775	823
18"	14	7.1	57	28	200	678	749	787	200	699	775	800	250	719	787	864	250	739	813	864	250	759	838	871
20"	15	7.6	60	30	200	729	800	838	200	749	826	851	250	770	838	914	250	790	864	914	250	810	889	921
24"	16	8.0	64	32	200	831	902	940	200	851	927	953	250	871	940	1016	250	892	965	1029	250	912	991	1021
30"	21	10	84	42	200	983	1054	1092	250	1003	1080	1156	250	1024	1092	1168	250	1044	1118	1181	250	1064	1143	1181
36"	24	12	98	49	200	1135	1207	1245	250	1156	1232	1308	250	1176	1245	1321	250	1196	1270	1334	250	1217	1295	1334
42"	28	14	110	55	200	1288	1372	1397	250	1308	1384	1461	250	1328	1410	1473	250	1349	1435	1486	250	1369	1448	1481
48"	32	16	126	63	200	1440	1524	1549	250	1461	1537	1613	250	1481	1562	1626	250	1501	1588	1638	250	1521	1600	1631
56"	37	18	147	74	200	1643	1727	1753	250	1664	1740	1816	250	1684	1765	1829	250	1704	1791	1842	250	1725	1803	1841
60"	40	20	158	79	200	1745	1829	1854	250	1765	1842	1918	250	1786	1867	1930	250	1806	1892	1943	250	1826	1905	1942
66"	44	22	173	87	200	1897	1981	1981	250	1918	1994	2045	250	1938	2019	2057	250	1958	2045	2070	250	1979	2057	2074
72"	48	24	189	95	200	2050	2134	2159	250	2070	2146	2223	250	2090	2172	2235	250	2111	2197	2248	250	2131	2210	2242

PyroWrap Anchored Support**DESIGNATION EXAMPLE****HAPW - 8 x 30 - 100 - 600 - 7.6 - 2.6 - 13**

Model No. Nominal Pipe Size (mm) Insulation Thickness (mm) BOP (mm) Support Length (L) (mm) Vertical Load (kN) Lateral Load (kN) Axial Load (kN)

**Ordering Instructions:**

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- BOP
- Support Length
- Vertical Load
- Lateral Load
- Axial Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

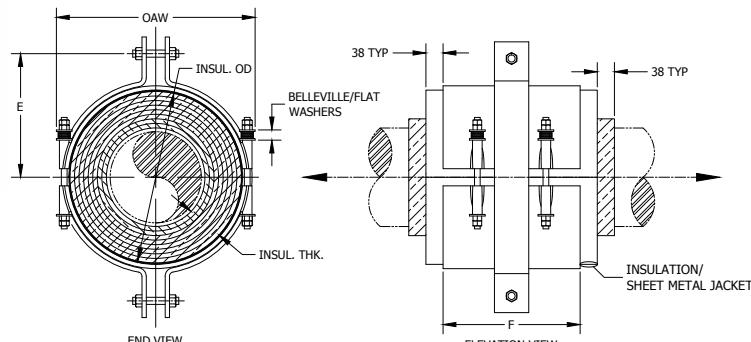
Sizing Chart Cont'd

NOM PIPE SIZE	LOW LOAD OPTION			HIGH LOAD OPTION			INSULATION THICKNESS																				
	VERT. (kN)	LAT. (kN)	AXI. (kN)	VERT. (kN)	LAT. (kN)	AXI. (kN)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	BOP (mm)	INSUL. OD (mm)	OAW (mm)	OAH (mm)	
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																											
1"	0.9	0.3	1.8	4.0	1.4	6.0	100	56	152	152	100	74	165	165	100	94	178	178	100	114	203	191	100	135	216	191	
1-1/2"	1.3	0.5	2.6	5.8	2.0	8.8	100	69	165	165	100	89	178	178	100	109	191	191	100	130	216	203	100	150	229	216	
2"	1.6	0.6	3.2	7.3	2.6	11	100	81	165	178	100	102	191	191	100	122	203	203	100	142	229	216	100	163	241	229	
2-1/2"	2.0	0.7	4.0	8.8	3.1	13	100	94	178	191	100	114	203	203	100	135	216	216	100	155	229	229	100	175	254	241	
3"	2.4	0.8	6.2	11	3.8	16	100	109	191	216	100	130	216	216	100	150	229	229	100	170	241	241	100	191	267	254	
4"	3.7	1.3	7.7	14	4.8	21	100	135	216	241	100	155	229	241	100	175	254	254	100	196	267	267	100	216	279	279	
6"	5.7	2.0	11	20	7.1	31	100	191	267	292	100	208	279	305	100	229	318	318	100	249	318	318	100	269	330	330	
8"	7.6	2.6	13	26	9.3	40	100	241	305	343	100	259	318	356	100	279	343	368	100	300	356	368	100	320	381	381	
10"	8.9	3.1	16	33	12	50	100	295	356	394	100	315	381	406	100	335	394	419	100	353	419	432	100	373	432	432	
12"	9.8	3.4	19	39	14	59	100	345	406	445	100	366	432	457	100	386	445	470	100	404	470	483	100	424	483	483	
14"	11	3.9	21	44	16	67	100	376	432	483	100	396	457	495	100	417	483	495	100	437	495	508	100	457	521	521	
16"	13	4.5	24	52	18	77	100	427	483	533	100	447	508	546	100	467	533	559	100	488	546	559	100	508	572	622	
18"	14	5.0	27	57	20	85	100	478	546	584	100	498	572	597	100	518	597	610	100	538	610	610	100	559	635	673	
20"	15	5.3	29	60	21	91	100	528	597	635	100	549	622	648	100	569	648	660	100	589	660	660	100	610	686	724	
24"	16	5.6	35	64	22	96	100	630	699	737	100	650	724	749	100	671	749	762	100	691	762	775	100	711	787	826	
30"	21	7.3	43	84	29	125	100	782	851	889	100	803	876	902	100	823	902	914	100	843	914	978	100	864	940	978	
36"	24	8.6	52	98	34	147	100	935	1003	1041	100	955	1029	1054	100	975	1096	1067	1130	100	1016	1092	1130	100	1016	1092	1130
42"	28	9.7	60	110	39	165	100	1087	1168	1194	100	1107	1194	1207	100	1128	1207	1219	150	1148	1232	1283	150	1168	1245	1283	
48"	32	11	69	126	44	275	100	1240	1321	1346	100	1260	1346	1359	100	1280	1359	1372	150	1300	1384	1435	150	1321	1397	1435	
56"	37	13	80	147	52	321	100	1443	1524	1549	100	1463	1549	1562	100	1483	1562	1575	150	1504	1588	1638	150	1524	1600	1638	
60"	40	14	86	158	55	344	100	1544	1626	1651	100	1565	1651	1664	100	1585	1664	1676	150	1605	1689	1740	150	1626	1702	1740	
66"	44	15	95	173	61	378	100	1697	1778	1778	100	1717	1803	1791	100	1737	1816	1803	150	1758	1842	1867	150	1778	1854	1867	
72"	48	17	104	189	66	413	100	1849	1930	1956	100	1869	1956	1969	100	1890	1969	1981	150	1910	1994	2045	150	1930	2007	2045	

PyroWrap Hanging Support

DESIGNATION
EXAMPLE**HHPW - 8 x 30 - 9 - 1200**

Model No.

Nominal
Pipe Size
(mm)Insulation
Thickness
(mm)Support
Length (F)
(mm)Vertical
Load
(kN)

Ordering Instructions:

To Order, Please Specify:

- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Support Length (F)
- Vertical Load
- Movements

* See last page of this document for new designation model number construction.

** Information presented on this page subject to change without notice.

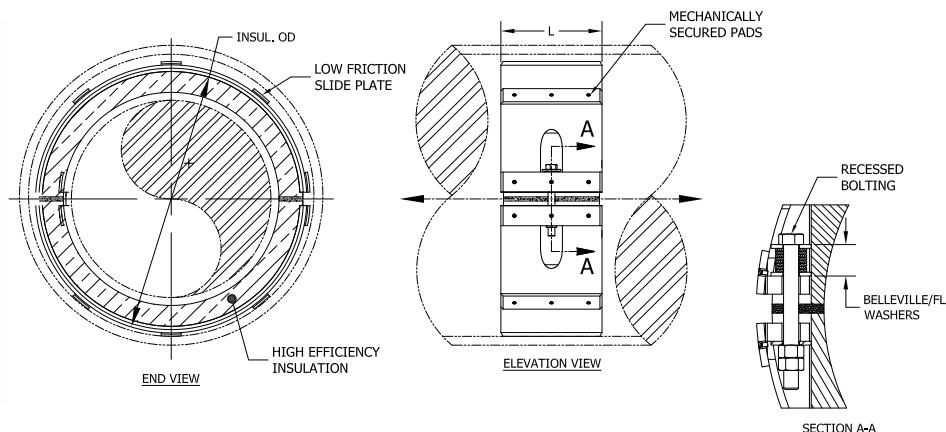
NOM PIPE SIZE	LOW VERT. LOAD (kN)	HIGH VERT. LOAD (kN)	INSULATION THICKNESS														
			10mm			20mm			30mm			40mm			50mm		
INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)	INSUL. OD (mm)	F (mm)	OAW (mm)
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																	
1"	0.3	0.8	56	229	102	74	229	165	94	229	178	114	229	203	135	229	216
1-1/2"	0.4	1.7	69	229	114	89	229	178	109	229	191	130	229	216	150	229	229
2"	0.6	2.5	81	229	127	102	229	191	122	229	203	142	229	229	163	229	241
2-1/2"	0.9	3.4	94	229	140	114	229	203	135	229	216	155	229	229	175	229	254
3"	1.0	4.2	109	229	191	130	229	216	150	229	229	170	229	241	191	229	267
4"	1.4	6.0	135	229	254	155	229	267	175	229	292	196	229	305	216	229	330
6"	3.0	9.4	191	229	305	208	229	318	229	229	343	249	229	356	269	229	381
8"	5.3	13	241	229	356	259	229	381	279	229	394	300	229	419	320	305	432
10"	6.9	16	295	305	406	315	305	432	335	305	445	353	305	470	373	305	483
12"	13	20	345	305	432	366	305	457	386	305	483	404	305	495	424	305	521
14"	15	23	376	305	483	396	305	508	417	305	533	437	305	546	457	305	572
16"	17	27	427	305	546	447	305	572	467	305	597	488	305	610	508	305	635
18"	19	30	478	305	597	498	305	622	518	305	648	538	305	660	559	305	686
20"	21	33	528	305	699	549	305	724	569	305	749	589	305	762	610	305	787
24"	39	40	630	305	851	650	305	876	671	305	902	691	305	914	711	305	940
30"	49	51	782	381	1003	803	381	1029	823	381	1054	843	381	1067	864	381	1092
36"	59	61	935	381	1168	955	381	1194	975	381	1207	996	381	1232	1016	381	1245
42"	69	71	1087	381	1321	1107	381	1346	1128	381	1359	1148	381	1384	1168	381	1397

Sizing Chart Cont'd

NOM PIPE SIZE	LOW VERT. LOAD (kN)	HIGH VERT. LOAD (kN)	INSULATION THICKNESS														
			60mm			70mm			80mm			90mm			100mm		
			INSUL. OD (mm)	F (mm)	OAW (mm)												
Do you need special loads or dimensions for this design? Please contact us at (713) 466-4777 or sales@rilco.com!																	
1"	0.3	0.8	155	229	229	175	229	254	196	229	267	216	229	279	234	229	305
1-1/2"	0.4	1.7	170	229	241	191	229	267	208	229	279	229	229	292	249	229	318
2"	0.6	2.5	180	229	254	201	229	267	221	229	292	241	229	305	262	229	330
2-1/2"	0.9	3.4	193	229	267	213	229	279	234	229	305	254	229	318	274	229	343
3"	1.0	4.2	211	229	279	231	229	305	249	229	318	269	229	343	290	229	368
4"	1.4	6.0	236	229	356	257	229	368	274	229	394	295	229	406	315	229	432
6"	3.0	9.4	290	229	406	310	229	419	330	229	445	351	229	457	368	229	483
8"	5.3	13	340	305	457	361	305	470	381	305	495	401	305	521	419	305	533
10"	6.9	16	394	305	508	414	305	521	434	305	546	455	305	572	475	305	584
12"	13	20	445	305	533	465	305	559	485	305	572	505	305	597	526	305	622
14"	15	23	478	305	584	498	305	610</									

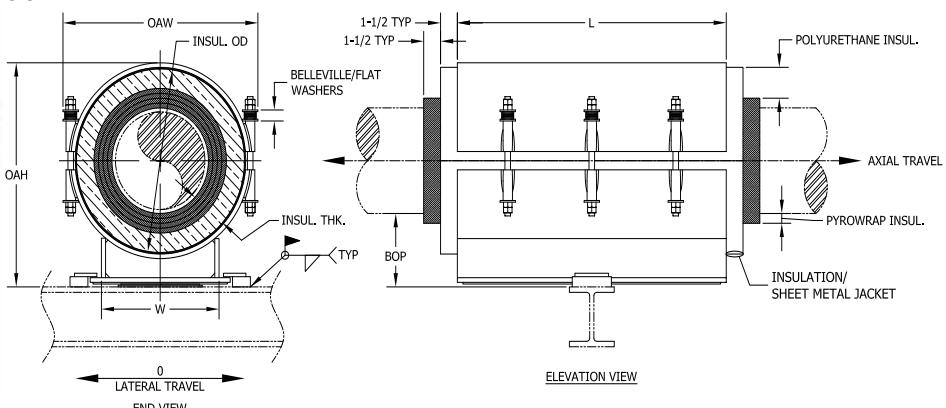
Pipe in Pipe Support

Designed to support inner pipe with an underground casing



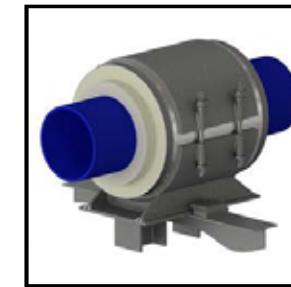
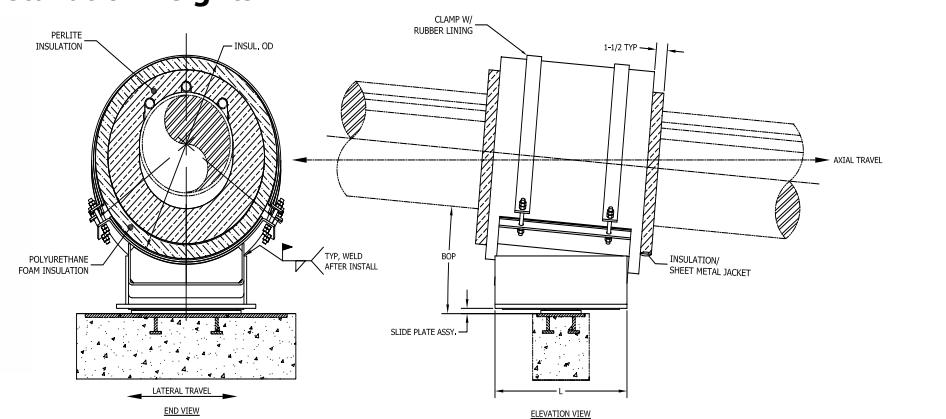
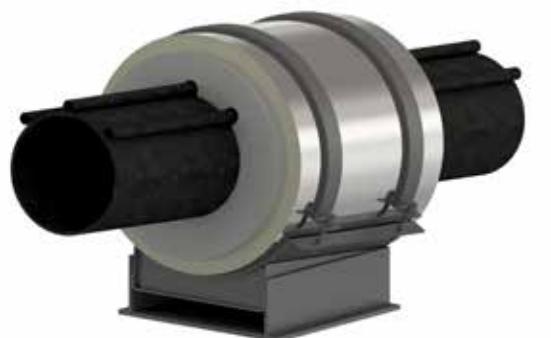
Dual Temp Pipe Support

Operating temperature from -40° to 1200°F



Adjustable Height Pipe Support

Field adjustable support for variable installation heights



CAPF - 4x1.5-4-12-400-140-250

TEMPERATURE CLASSIFICATION

HOT (H) - (typical range 0°F to 1200°F)

COLD (C) - (typical range -450°F to 200°F)

DUAL TEMP (D) - (typical range -450°F to 1200°F)

FUNCTION

SLIDE (S) (for vertically restrained pipe)
i.e. HSCS-3x1.5-4-12-2100

- **SLIDE** (H) (for vertically restrained pipe,
high lateral travel)
i.e. HS(H)CS-1x1.5-4-6-225-80

GUIDE (G) (for vertically and laterally
restrained pipe)
i.e. HGCS-6x1.5-4-6-1275-450

- **GUIDE** (L) (for vertically and laterally
restrained pipe, allows uplift of piping)
i.e. HG(L)CS-1x1.5-4-6-225-80

- **GUIDE** (M) (for vertically and laterally
restrained pipe, guided at cradle)
i.e. HG(M)CS-1x1.5-4-6-225-80

ANCHOR (A) (for vertically, laterally and axially
restrained pipe)
i.e. HACS-4x1.5-4-6-840-295-1730

HANGING (H) (for vertically restrained pipe)
i.e. HHCS-3x1.5-4-12-2100

RISER (V) (for vertically restrained pipe)
i.e. HVCS-3x1.5-4-12-2100

FLAT (F) (for vertically restrained pipe)
i.e. HFCS-3x1.5-4-12-2100

ROLLER (R) (for vertically restrained pipe)
i.e. HRCS-3x1.5-4-12-2100

INSULATION TYPE

Calcium Silicate (CS)

PyroWrap (PW) (Aspen Aerogels Pyrogel® XT-E)

Polyurethane Foam (PF)

FOAMGLAS® (FG)

CryoWrap (CW) (Aspen Aerogels Cryogel® Z)

* AXIAL LOAD (lbs)

* LATERAL LOAD (lbs)

* VERTICAL LOAD (lbs)

* STEEL LENGTH (in)

* BOP (in)

* INSULATION THICKNESS (in)

* PIPE SIZE (in)

*For METRIC use (mm) and (kN) where applicable.

MANAGEMENT SYSTEM CERTIFICATE

Certificate No:
CERT-06335-2004-AQ-HOU-ANAB

Initial certification date:
09 January 2004

Valid:
16 March 2019 - 16 March 2022

This is to certify that the management system of

Rilco Manufacturing Co., Inc.

12700 Tanner Road, Houston, TX, 77041, USA
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
ISO 9001:2015

This certificate is valid for the following scope:

The Design and Manufacture of Insulated Pipe Supports, Steel Fabrication and Spring Hangers.

Place and date:
Katy, TX, 29 January 2019



For the issuing office:
DNV GL - Business Assurance
1400 Ravello Drive, Katy, TX, 77449-5164,
USA


John Stefan
Management Representative

Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV GL Business Assurance USA, Inc., 1400 Ravello Drive, Katy, TX 77449 USA TEL: 281-396-1000 dnvglcert.com



PRESIDENT'S LETTER

Here at Rilco Manufacturing we have strived to maintain a focus of customer-service within ourselves and inspire this within our employees. We strive to exceed clients' expectations by providing the most reliable information available, upholding our promise of the highest quality products, and consistently meeting our delivery deadlines. Since Rilco Manufacturing was established in 1972 we have also made it a goal of ours to remain at the forefront of technology within our industry. We invest considerable capital into various research and development experiments each year to ensure our pipe support system designs, materials, and components are tried and true meeting all safety and performance standards.

With quality, safety, reliability, and a high level of customer service always in the minds of our employees we aim to perform at our highest level from even the smallest projects we receive to the largest projects we are awarded.

The near future will be an exciting time for Rilco Manufacturing as we evolve and grow into a lean operating company and more than double our current production space. We cater to a diverse range of customers and are capable of customizing our products for almost any project need.

I thank you for your interest in our growing company and I truly look forward to our continued partnership and exploring relationships with new organizations that will potentially be added to our worldwide client base.

Sincerely,



Kenneth L. Zagorski
President & CEO



RILCO Manufacturing Company, Inc.

12700 Tanner Road
Houston, Texas 77041
(713) 466-4777, Fax (713) 466-6547

WWW.RILCO.COM

