

About Crest Technologies

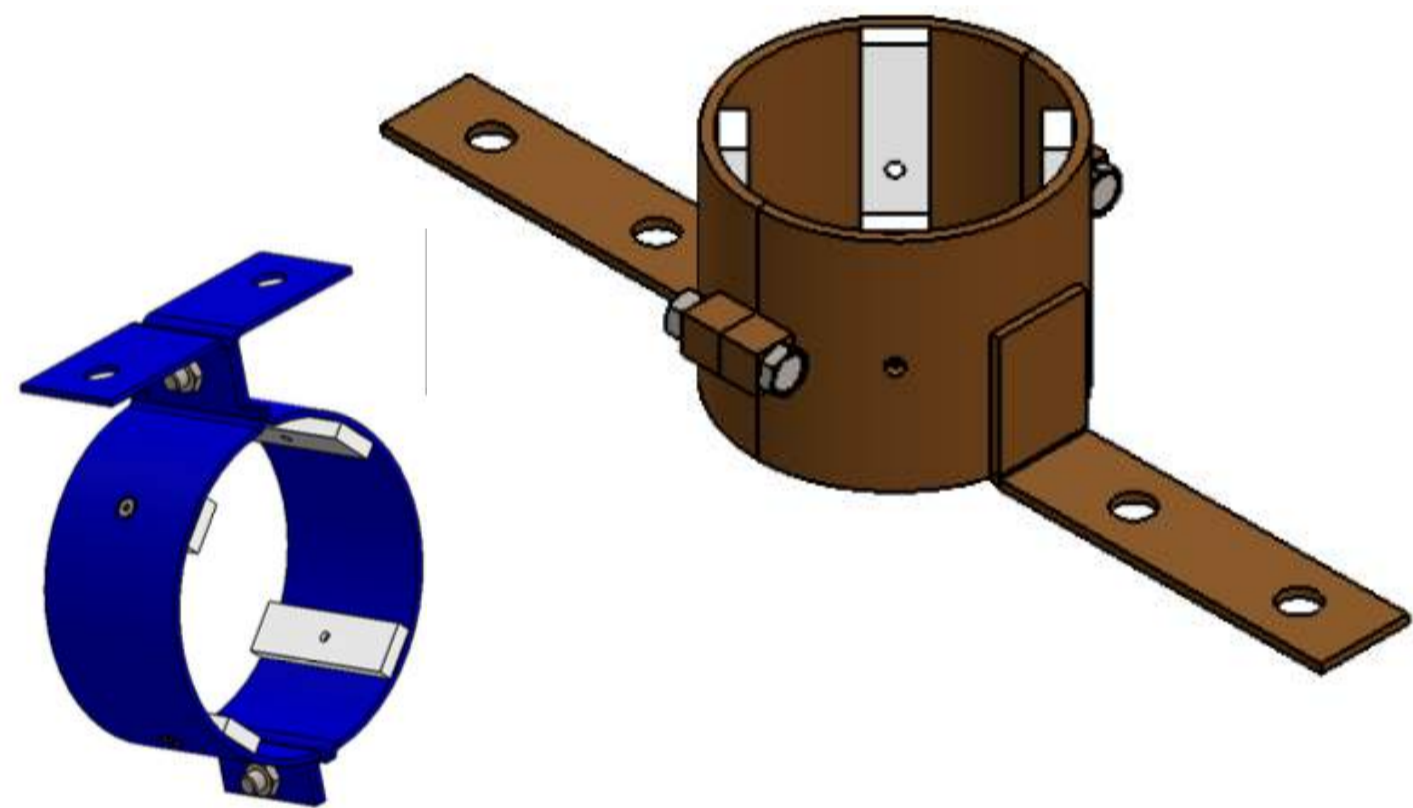
Crest Technologies is a dedicated engineering company specializing in high-performance pipe guide systems designed for modern infrastructure. With a focus on structural precision and thermal expansion control, we provide solutions that enhance mechanical reliability across high-rise buildings, commercial developments, and industrial systems. Our expertise lies in developing robust, modular pipe guides that ensure smooth axial movement while preventing lateral stress—critical to the integrity of any piping network.

From standard CS/SS pipe guides to copper-compatible models with dielectric isolation, our product line addresses diverse project needs. We also offer suite riser guides for compact installations and spider guides engineered for insulated vertical pipes. All products are built using high-grade carbon steel, UHMW, and PTFE components to ensure long-term durability under real-world conditions. At Crest, every guide is engineered to perform—holding systems steady, safely, and silently. At Crest Technologies, our approach combines engineering expertise with real-world functionality.

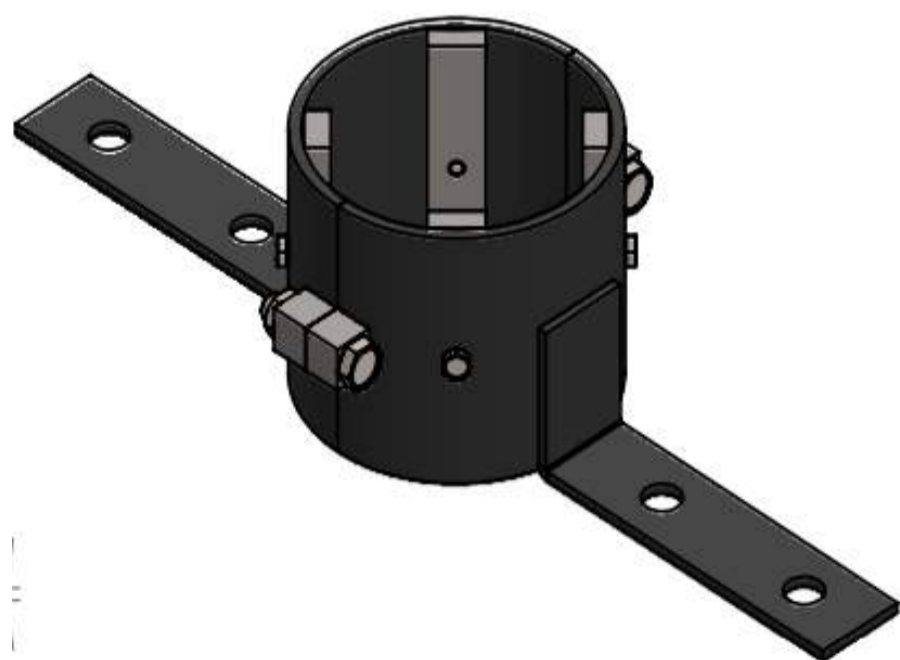
What are Pipe Guides?

Pipe guides are essential components in mechanical piping systems, specifically designed to control the movement of pipes during thermal expansion and contraction. As pipes heat up or cool down—especially in high-rise buildings, HVAC risers, or pressurized water systems—they expand or shrink in length. Without a guiding mechanism in place, this movement can cause the pipe to deflect, buckle, or exert stress on joints, supports, and surrounding structures.

A pipe guide allows the pipe to move freely along its axial direction (in a straight line) while restricting lateral or angular movement. This ensures the pipe expands and contracts in a predictable manner, protecting both the pipe and the structural elements around it. Guides are typically installed in a series along vertical or horizontal runs, working together with anchors and expansion joints to form a complete pipe movement control system.

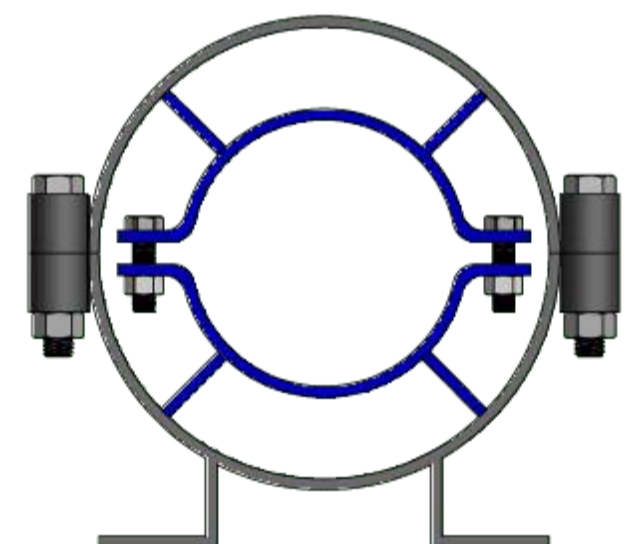


A pipe guide allows the pipe to move longitudinally (axially) while restricting sideways or rotational motion. This ensures that the pipe expands or contracts in a controlled direction—usually toward an expansion joint—while preventing bending or rubbing against structural elements. Installed between anchors, pipe guides keep the pipe on a fixed axis, maintaining alignment across multiple floors or long horizontal runs. Each guide is composed of a housing (usually carbon steel or stainless steel) and low-friction liners (typically UHMW or PTFE), which cradle the pipe and allow smooth movement. Depending on the application, pipe guides can be bare or insulated, clamp-on or base-mounted, and may include dielectric spacers to prevent galvanic corrosion when used with copper pipes.



In multi-storey buildings, especially those with long vertical risers and tightly packed mechanical shafts, temperature fluctuations across floors can result in significant pipe movement. This movement isn't just a structural concern—it can also lead to noisy systems, leaks at joints, fractured fittings, and even damage to surrounding insulation or wall penetrations.

Pipe guides play a silent but crucial role in preventing these issues. When installed in coordination with pipe anchors, they define the direction in which a pipe is allowed to move. By eliminating lateral or rotational motion, guides preserve the alignment of expansion joints, insulation jackets, and vibration isolators. Without this guidance, expansion forces can distribute unevenly, leading to misalignment, increased mechanical wear, and costly maintenance.



Applications of Pipe Guides in Buildings Systems

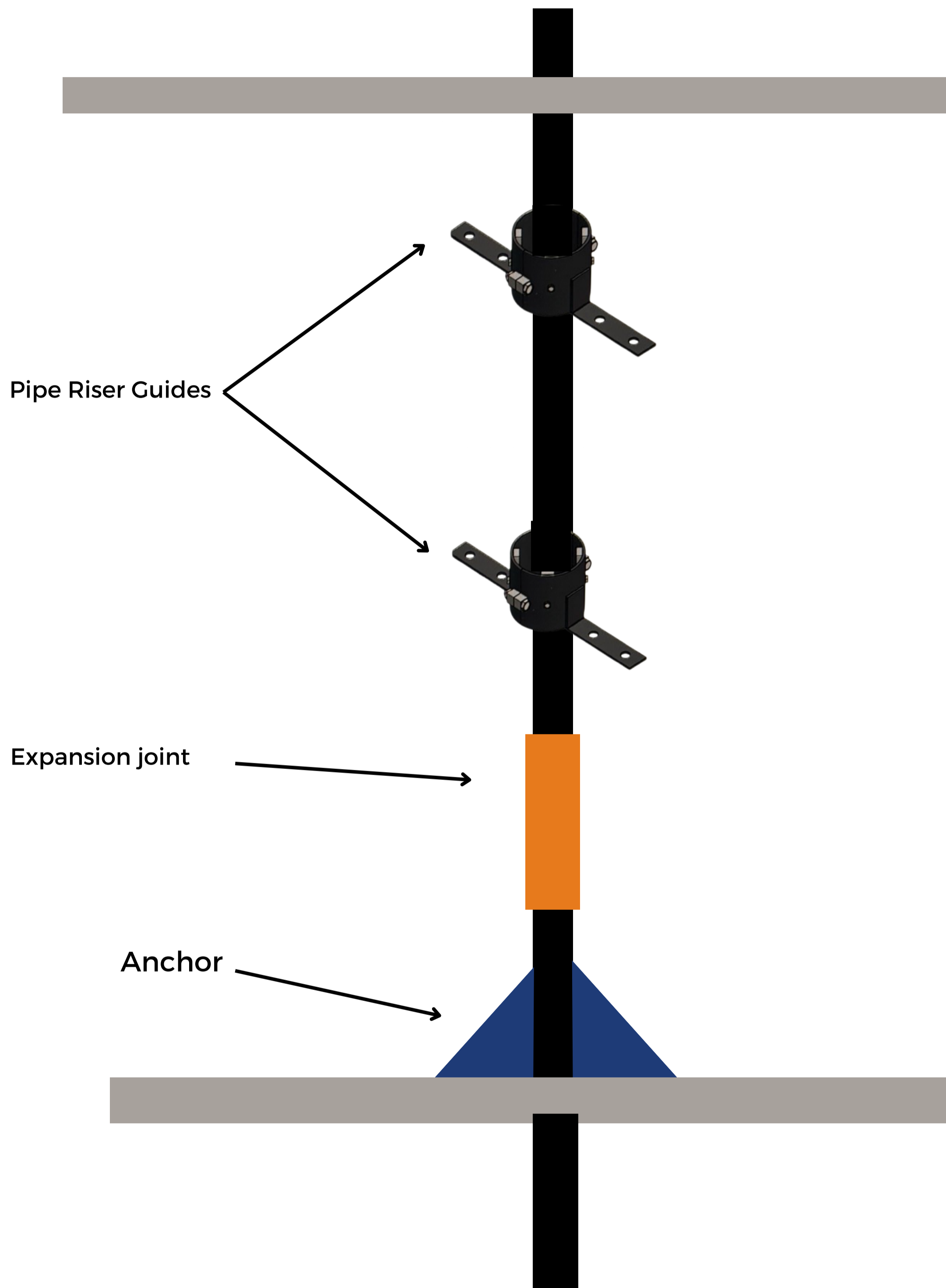


Pipe guides are essential components in modern building mechanical systems, especially in commercial, industrial, and multi-residential construction. Their primary purpose is to control the linear movement of piping systems caused by thermal expansion and contraction, seismic activity, or system pressure changes. By guiding the pipe's motion along a predefined axis and preventing lateral displacement, they help maintain structural integrity and prolong the life of the piping system.

This diagram illustrates a typical vertical riser system using pipe guides, expansion joints, and anchors across multiple floors.

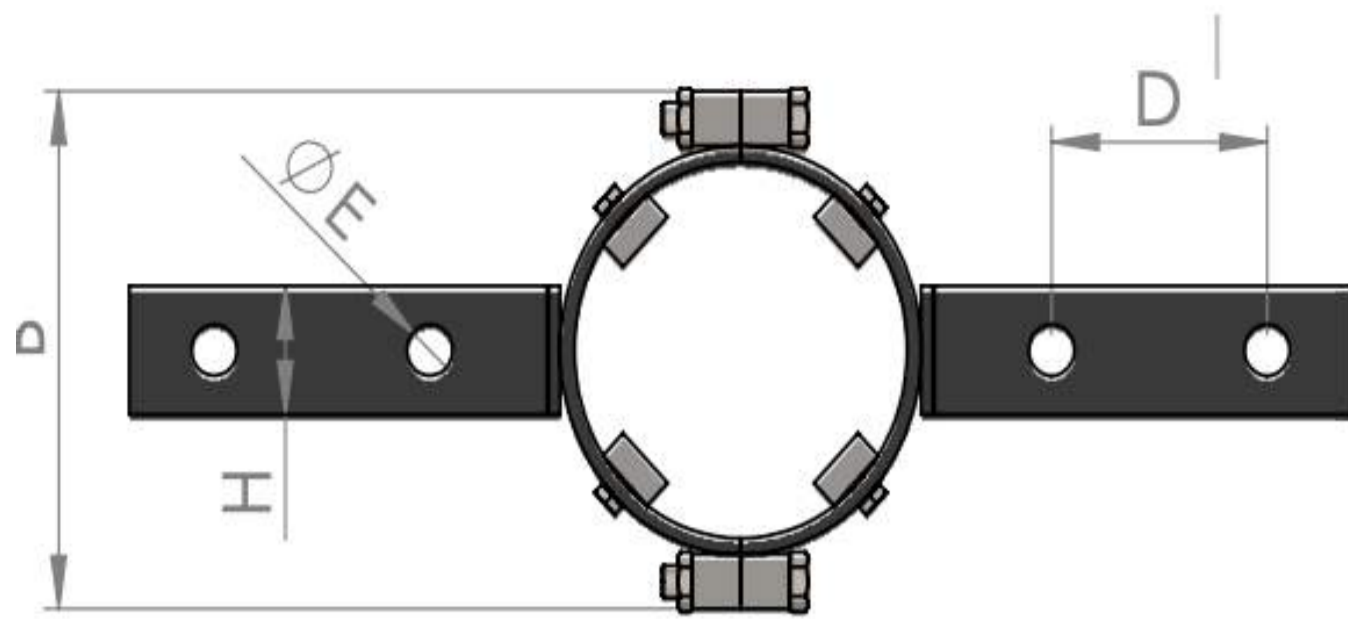
Pipe Riser Guides are installed at each level to control linear movement due to thermal expansion, preventing lateral displacement and ensuring proper alignment. Expansion Joints are placed between guides to absorb pipe expansion and contraction, protecting the system from thermal stress. Anchors are positioned near these joints to lock specific points, directing movement where it's intended and preventing structural strain.

This setup is ideal for high-rise buildings and long vertical piping runs, ensuring safe, efficient, and code-compliant system performance. Crest Technologies' guide and anchor solutions offer durability and precision for demanding building applications.

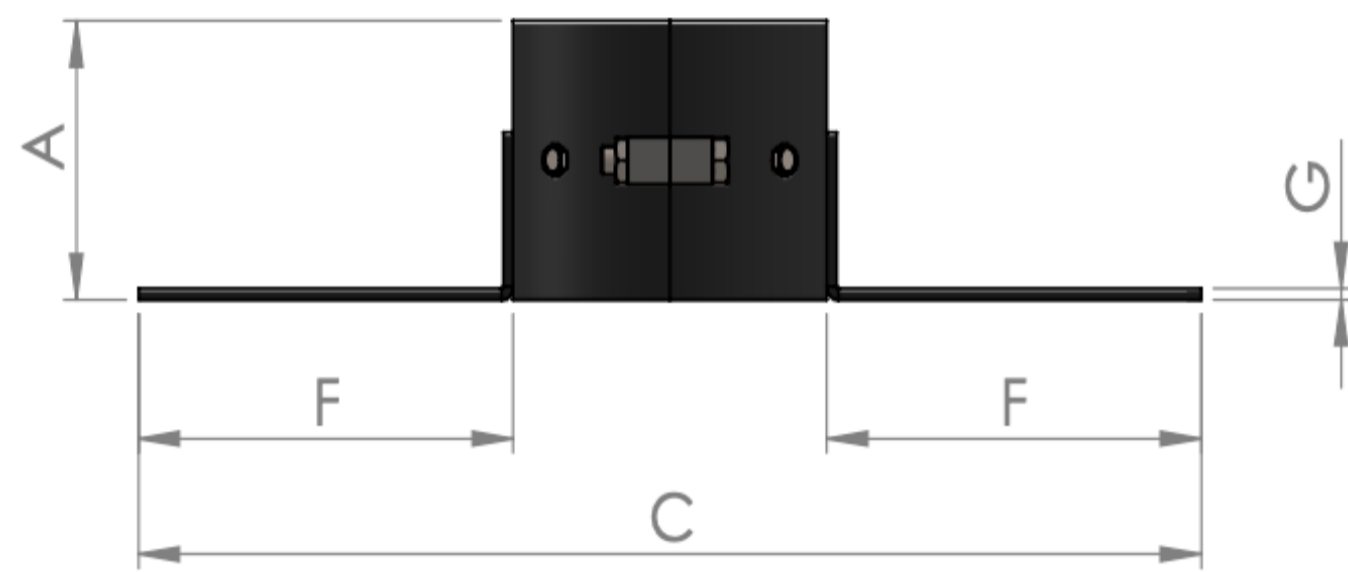


In HVAC systems, pipe guides are used to stabilize chilled water lines, condenser water pipes, and steam or hot water supply lines, ensuring they move safely within expansion joints without damaging walls, insulation, or other building components. Engineers rely on pipe guides to ensure compliance with design codes, optimize system performance, and minimize maintenance issues. Whether installed on rooftop piping, in mechanical rooms, or between floors, Crest Technologies' range of guides—including CS-SS, Copper, Spider, and Suite Risers—offer precision, durability, and adaptability across a wide range of building applications

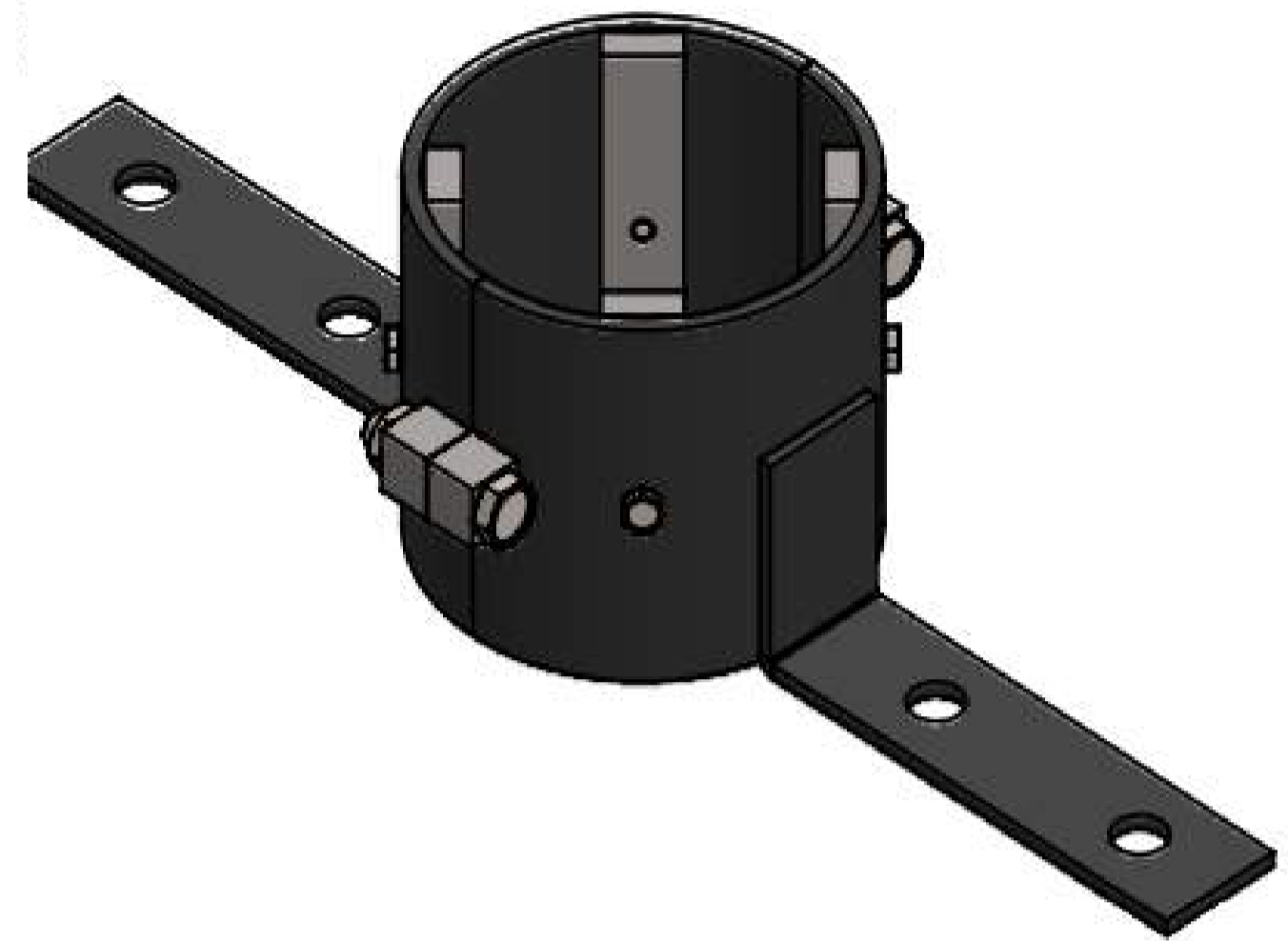
PRODUCT: CS/SS PIPE GUIDE - MODEL CT-PG



TOP VIEW



FRONT VIEW



ISOMETRIC VIEW

General Table

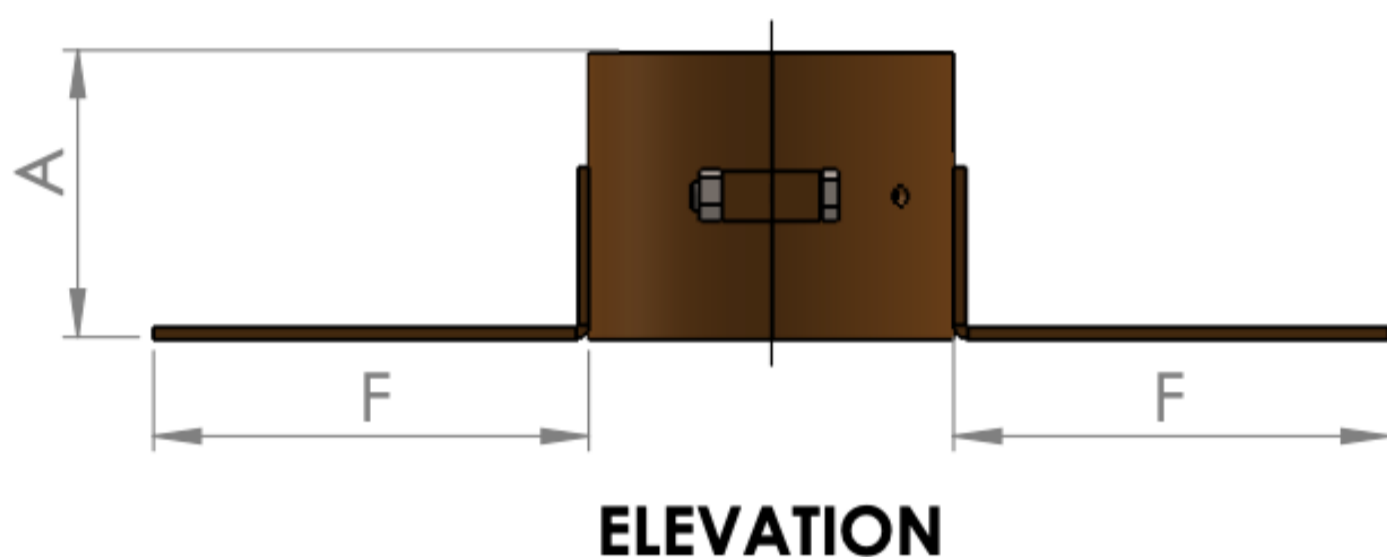
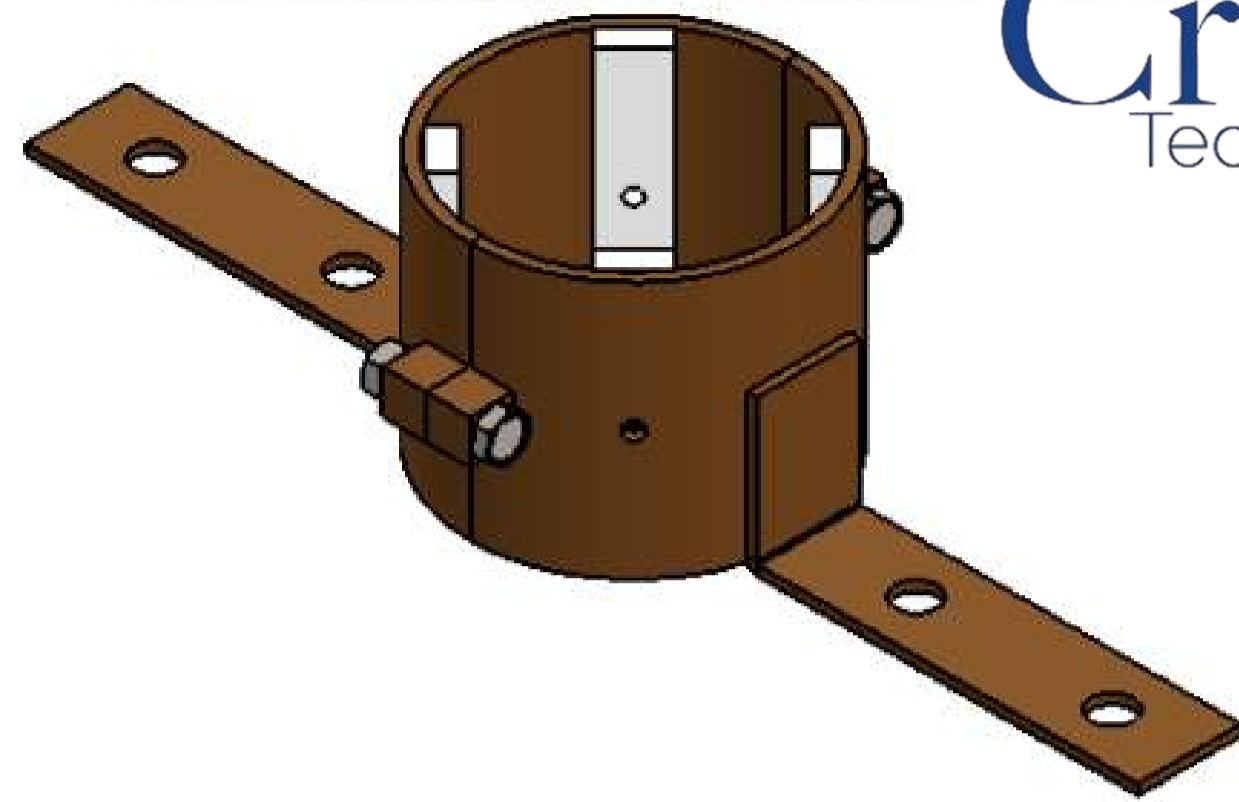
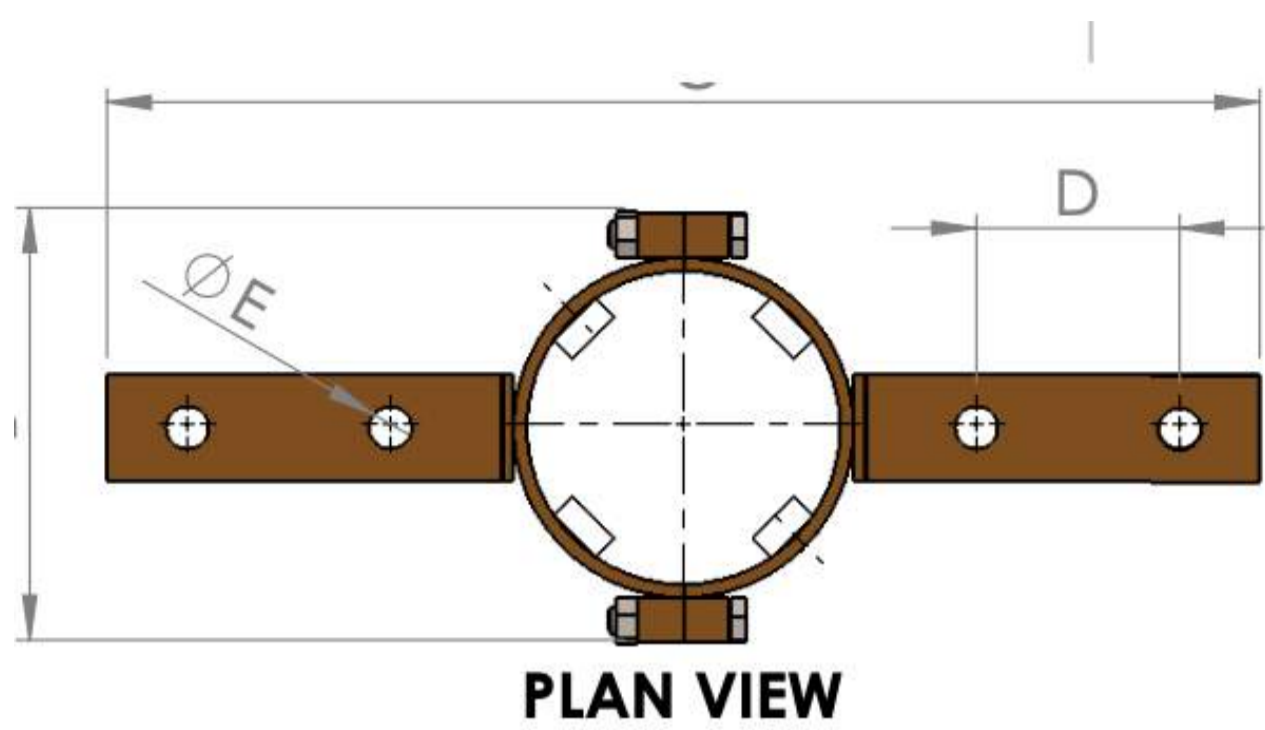
Sr. No.	NOMINAL PIPE SIZE		DIMENSOINS							
	Inch.	mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm
1	1"	25	100	139.5	393.3	76	16	152	4	40
2	1.25"	32	100	147.5	401.5	76	16	152	4	40
3	1.5"	38	100	164.3	418.5	76	16	152	4	40
4	2"	50	100	177.5	431.3	76	16	152	4	40
5	2-1/2"	65	100	199.5	443.3	76	16	152	4	50
6	3"	75	100	214.7	458.5	76	16	152	4	50
7	4"	100	100	239.3	483.1	76	16	152	5	50
8	6"	150	100	296.1	540	76	16	152	6	50
9	8"	200	100	346	886	219	16	300	6	70
10	10"	250	152	401.1	1060.9	250	16	360	6	80
11	12"	300	152	451.2	1111	250	16	360	6	80

3	2	CYLINDER HALVES AND BASE	CARBON STEEL
2	4	PLASTIC SLIDES	UHMW
1	2	HEX NUTS & BOLTS	CARBON STEEL
ITEM	QTY.	DESCRIPTION	MATERIAL

The CT-PG Pipe Guide from Crest Technologies is a robust, high-performance solution engineered for managing the axial movement of carbon steel and stainless steel piping in vertical and horizontal riser systems. Designed to ensure controlled thermal expansion while preventing lateral displacement, the CT-PG model enhances piping system stability and longevity in high-rise, industrial, and commercial mechanical installations.

Constructed from powder-coated carbon steel, the guide features two heavy-duty split cylinders that securely clamp around the pipe. Internally, UHMW polymer slides provide low-friction axial movement, enabling smooth thermal expansion and contraction. The guide is anchored to the slab or structural steel using bolted flanges, and accommodates a wide range of pipe sizes and insulation thicknesses.

Product : COPPER PIPE GUIDE _ MODEL CT_CP



- Designed specifically for copper riser pipes
- Dielectric spacers for corrosion prevention
- UHMW or PTFE liners for smooth axial movement
- Powder-coated carbon steel construction

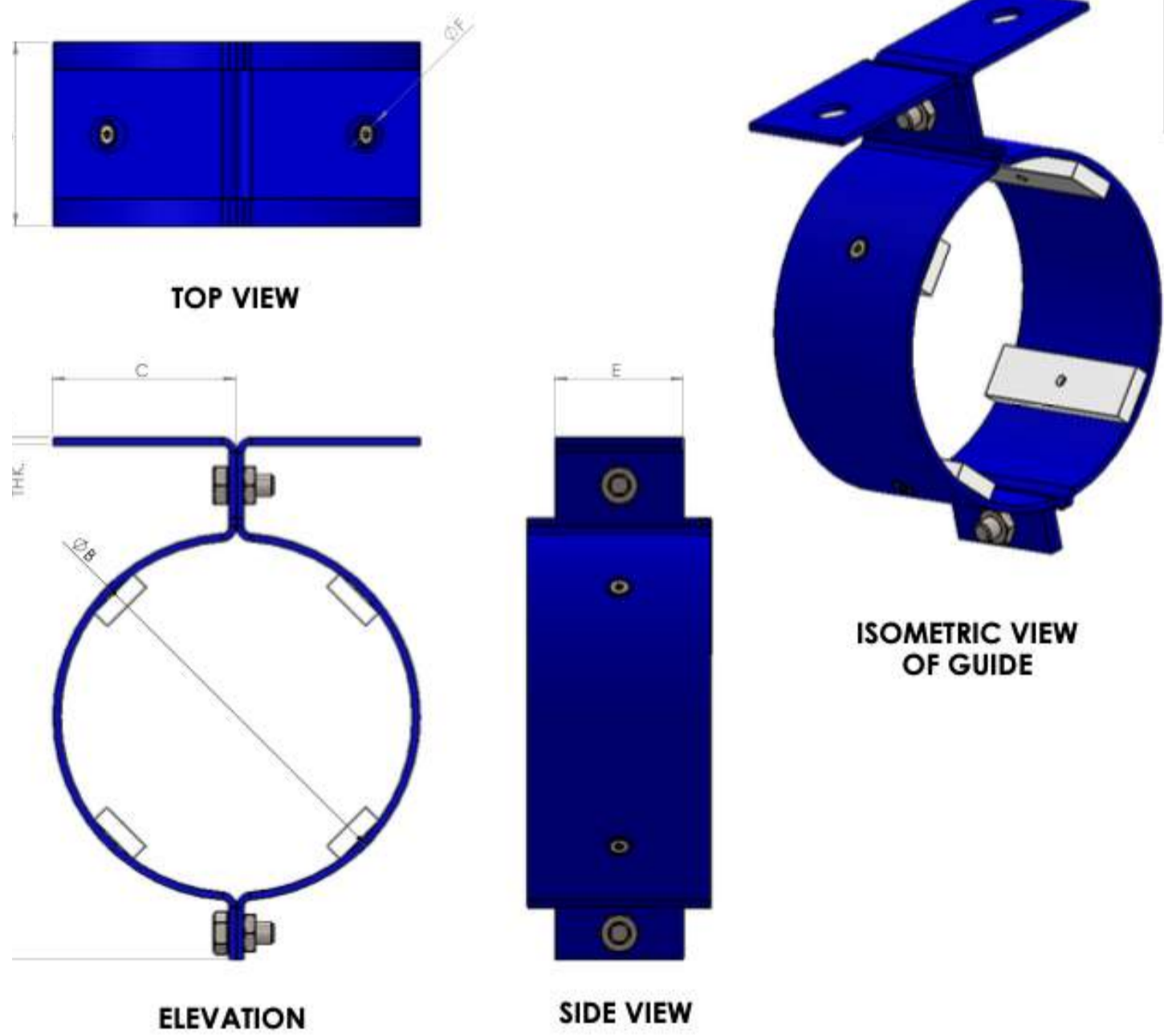
Sr. No.	NOMINAL PIPE SIZE Inch.	DIMENSOINS					
		A mm	B mm	C mm	D mm	E mm	F mm
1	3/4"	76	114	377.5	76	16	152
2	1"	76	120	383.6	76	16	152
3	1.25"	100	139	392.8	76	16	152
4	1.5"	100	146	399.4	76	16	152
5	2"	100	156.8	410.6	76	16	152
6	2-1/2"	100	179.1	422.9	76	16	152
7	3"	100	191.3	435.1	76	16	152
8	3.5"	100	203.7	447.6	76	16	152
9	4"	100	216.2	460.1	76	16	152

Crest Technologies' Copper Pipe Guide - Model CT-CP is engineered specifically for copper riser applications where thermal expansion control and electrical isolation are critical. Designed with precision-machined carbon steel components and integrated dielectric isolators, the CT-CP model prevents galvanic corrosion while allowing smooth axial movement.

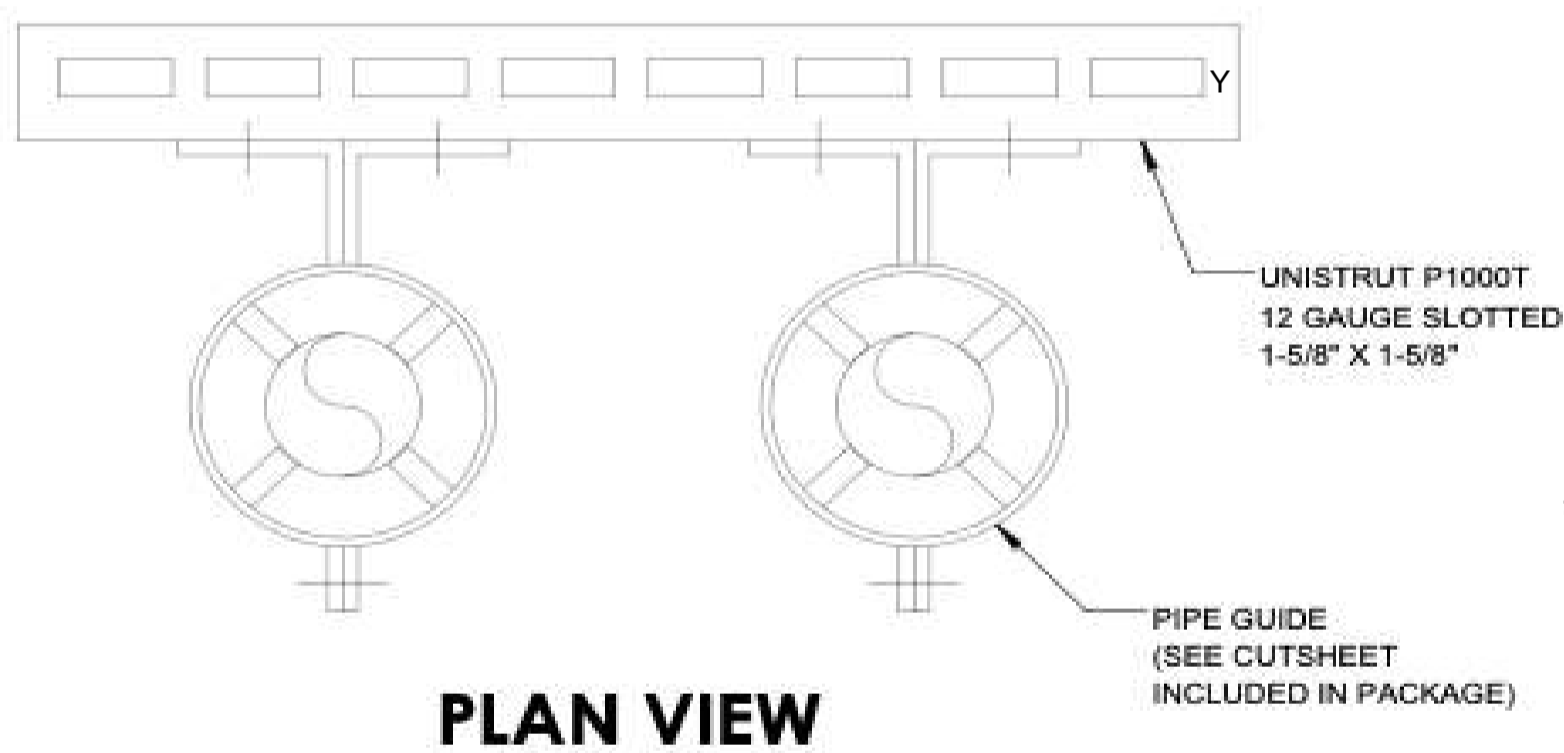
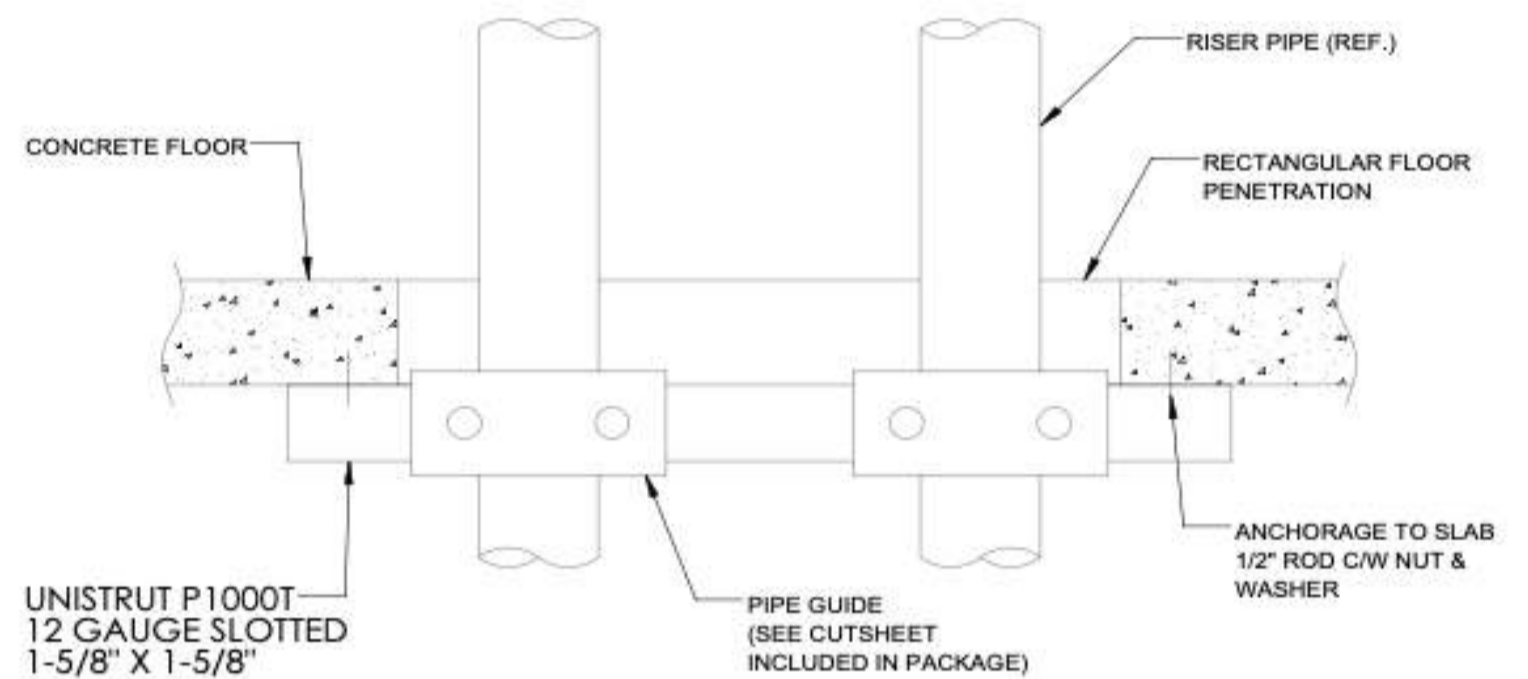
Each guide includes UHMW or PTFE liners to reduce friction, protect pipe surfaces, and enable consistent expansion under temperature fluctuations. The housing is fabricated from powder-coated carbon steel, offering long-term durability and corrosion resistance in mechanical shafts, vertical risers, and plumbing systems.

The CT-CP guide is ideal for HVAC, potable water, and domestic hot water lines using copper pipe systems in residential and commercial buildings.

Product: Suite Riser Guide - Model CT-RISER



- Designed for fan coil and heat pump riser systems
- Uses Unistrut P1000T channel (12 gauge slotted steel) for easy mounting
- Suitable for rectangular floor penetrations in multi-story buildings



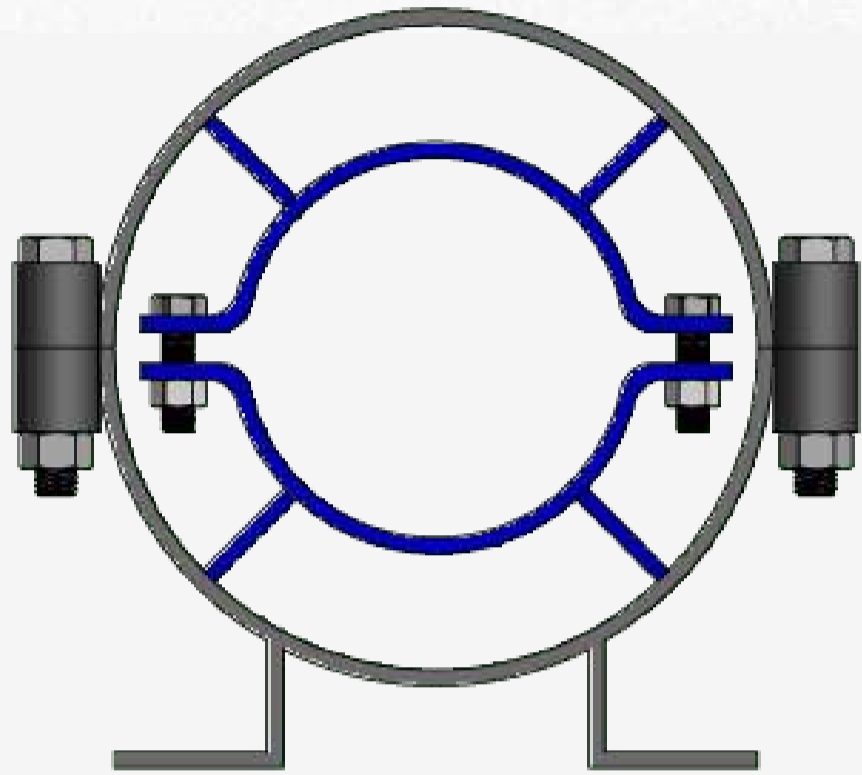
- Includes UHMW sleeves for smooth pipe movement
- Set screws are chrome-plated mild steel for durability
- Supports pipe sizes from 3/4" to 3"
- Fabricated using 3 mm thick carbon steel sheet metal
- Includes 4 mm Teflon sheets for thermal isolation and vibration control

The CT-RISER Suite Riser Guide by Crest Technologies is engineered for compact vertical riser applications in fan coil and heat pump systems, particularly within high-rise residential and commercial buildings. Its low-profile, slab-mounted design enables clean installations through rectangular floor penetrations, offering a precise guiding solution in areas where space is limited and insulation clearance is critical.

Sr. No.	NOMINAL PIPE SIZE	DIMENSOINS					
		A	DIA-B	C	D	E	DIA-F
	Inch.	mm	mm	mm	mm	mm	mm
1	3/4"	86	42.2	36.5	35	25	10
2	1"	94	48.6	36.5	40	30	10
3	1.25"	104	57.2	36.5	40	30	10
4	1.5"	111.5	63.6	38.5	40	30	10
5	2"	124.5	76.4	40	50	35	10
6	2.5"	136.5	88.8	43.5	50	35	10
7	3"	158	104	45	50	35	10

PRODUCT: Spider Guide

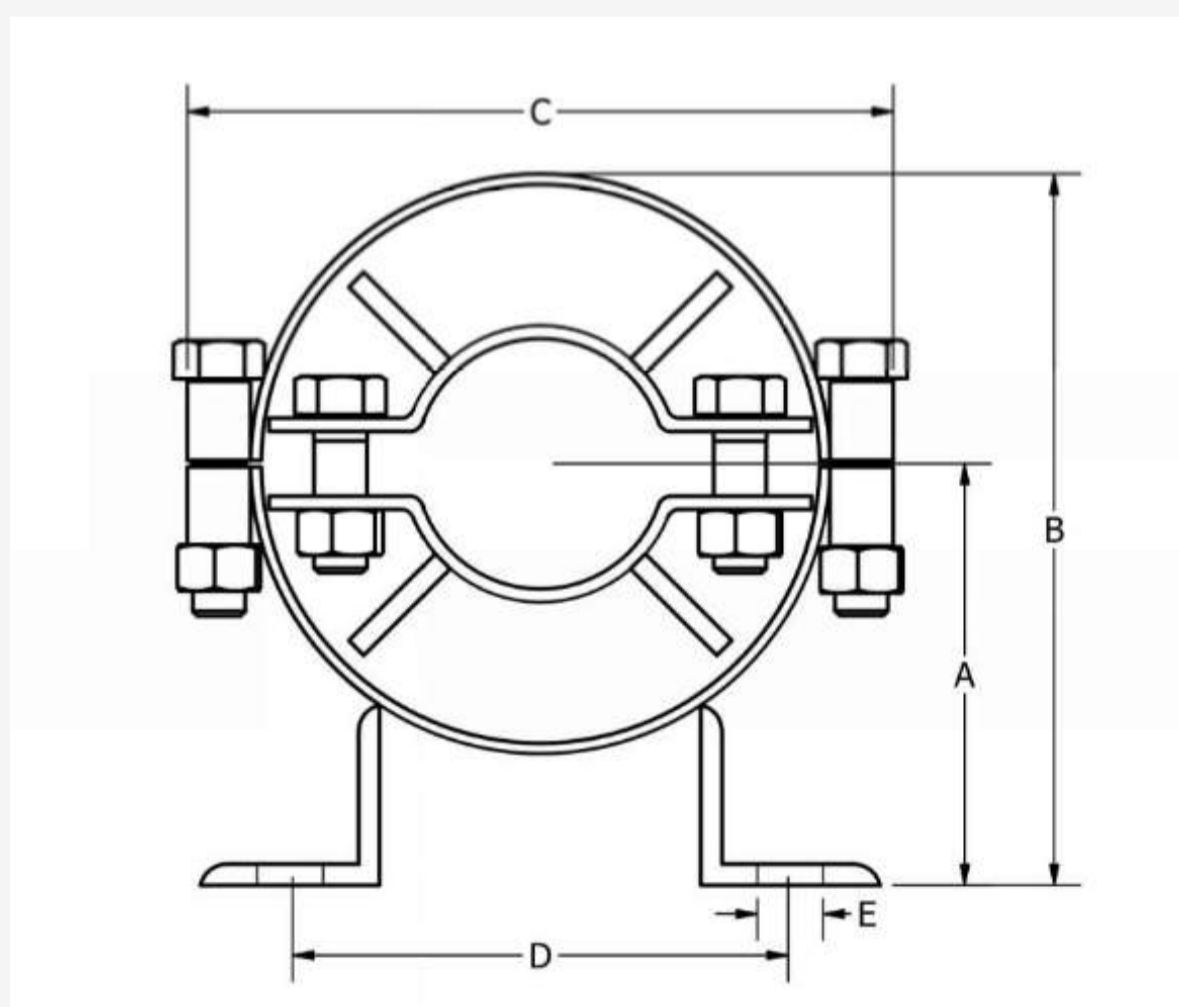
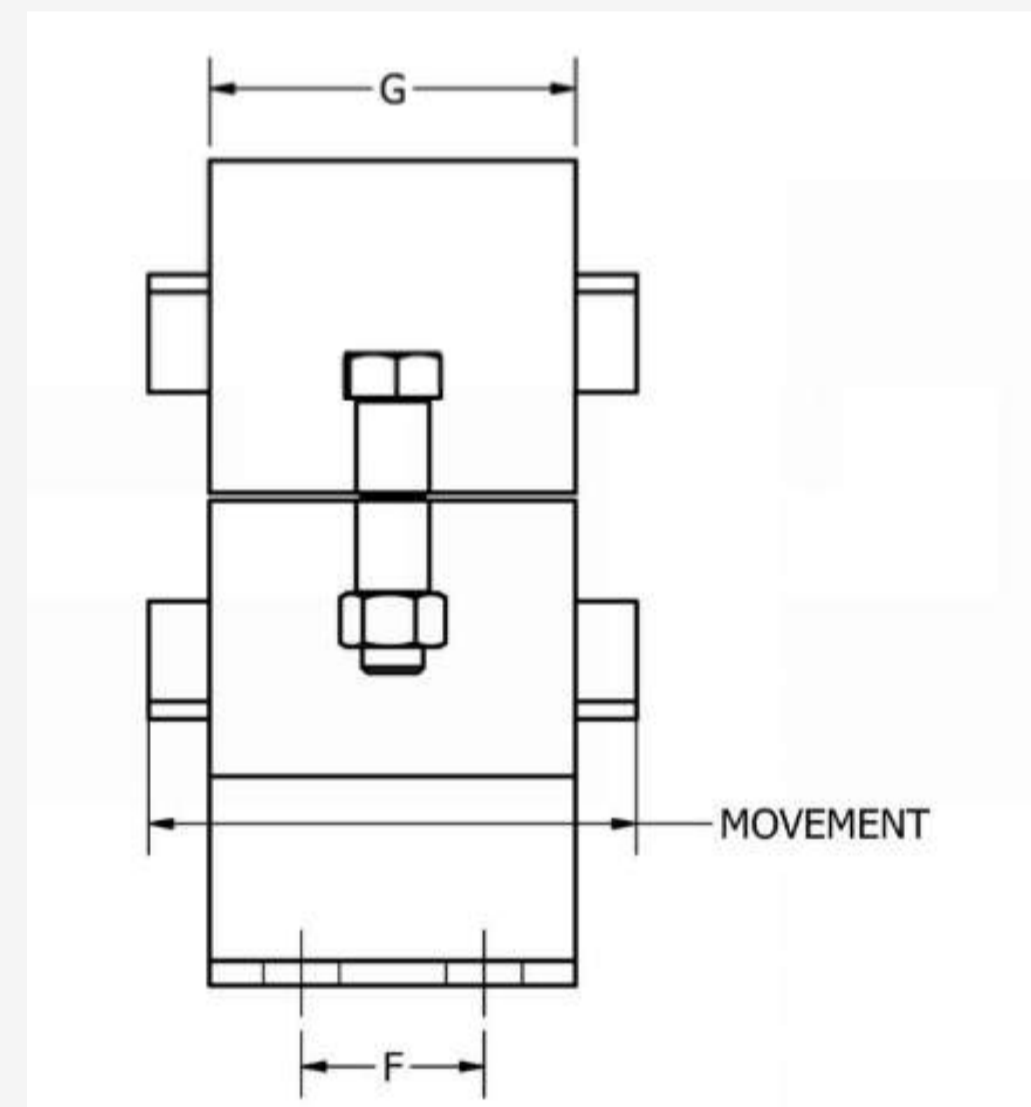
MODEL CT-SPIDER



The CT-SPIDER is designed to guide insulated vertical riser pipes while allowing controlled movement during thermal expansion and contraction. Ideal for multi-storey mechanical systems, this guide maintains precise pipe alignment without supporting load weight, making it an essential component for stress-free pipe travel in riser shafts.

Key Features

- **Non-Load Bearing:** Only for guiding – not meant to carry the pipe's weight.
- **Accommodates Thick Insulation:** Engineered for pipe insulation thicknesses up to 4
- **Multi-Point Contact:** Interior spider arms provide 360° directional pipe stabilization.
- **Anchoring Base:** Wide base with slotted holes for secure mounting and alignment.
- **Custom Sizes Available:** Diameters ranging from 2" to 12" (and more on request).



Material & Finish

- **Body:** Carbon Steel with Powder-Coated Finish
- **Spider Inserts:** UHMW (Ultra-High Molecular Weight Polyethylene)
- **Fasteners:** Zinc-Plated Grade A Bolts

NOTES :-

1. ANCOR BOLTS BY OTHERS.

UNLESS OTHERWISE SPECIFIED. ALL MATERIAL PLAIN C.S.

SLEEVES ARE OF UHMW AND SET SCREW ARE OF M.S. WITH CHROME PLATING.

4. CENTER TO CENTER OF HOLES CAN BE MODIFIED IF REQUIRED.

IOM for Riser Pipe Guides

Installation (I):

- * **Verify:** Use the correct guide type and size for the pipe and application (e.g., insulated, seismic).
- * **Position:** Install level/plumb, centered on the pipe, allowing necessary clearance for movement.
- * **Secure:** Fasten firmly to the structure using specified hardware and torque.
- * **Integrate:** Properly coordinate with insulation shields, fire stopping, or sleeves as required.

Operation (O):

- * **Guides are passive.** Their "operation" is simply performing their function correctly.
- * **Check:** Ensure the guide allows intended axial pipe movement (up/down for expansion/contraction) while preventing unwanted side-to-side movement, without binding the pipe.

Maintenance (M):

- * **Inspect Regularly:** Visually check guides periodically for damage (cracks, corrosion, distortion), loose fasteners, and proper pipe alignment.
- * **Action:** Tighten loose parts, clean debris, replace damaged guides. Address any corrosion or signs of binding.

Key Reminder: Always consult the specific manufacturer's instructions, project engineering drawings/specifications, and relevant codes (e.g., MSS SP-58, ASME B31 series, NFPA 13, Ontario Building Code) for detailed requirements.