



**BUCKAROOS, Inc.**

[www.buckaroos.com](http://www.buckaroos.com)

PRODUCT DATA SHEET

# CoolDry™ Insulated Sliding Saddles

## For Cold Dynamic Piping Systems

The **safest**, most **efficient**, and most **effective** way to control movement at hanger locations in a dynamic piping system.



### Description

CoolDry™ Insulated Sliding Saddles from Buckaroos, Inc. provide a single product solution to three main concerns at hanger locations in an engineered, dynamic piping system.

#### • Long Term System Integrity

CoolDry™ Insulated Sliding Saddles sliding saddle feature allows for a small amount of controlled, linear movement at the hanger location while maintaining the integrity of the insulation. This dynamic pipe insulation support eliminates the need of roller type supports and services a temperature range from -290°F to +250°F.

#### • Safety

CoolDry™ Insulated Sliding Saddles' insulation and facing each meet 25-50 Flame/Smoke ratings per ASTM E-84 on a component basis, this makes the product ideal for piping running through air plenums or projects demanding the 25-50 Flame/Smoke rating throughout the building.

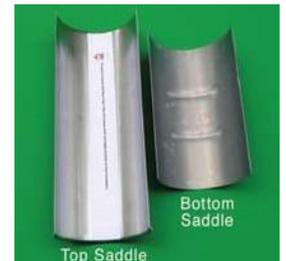
In traditional methods of insulating at hanger locations, the hanger may not stay in the installed position over time. In worst case scenarios, the hanger is far enough toward the edge of the saddle that the saddle falls to the ground. Such an event causes a serious safety concern. Galvanized sheet metal falling from above can be compared to a knife or blade. The even weight distribution and the partially bottom ribbed feature makes the CoolDry Sliding Saddles the safest way to insulate at the hanger location.

#### • Superior Moisture Control and Support Strength

CoolDry™ Insulated Sliding Saddles feature a high density 3.75 PCF and 5.0 PCF phenolic foam pipe insulation for excellent pipe insulation support along with water vapor permeability of  $\leq 4$  perm-inch. The insulation's facing is a premium puncture resistant vapor barrier membrane with a true perm rating of Zero and has no known nutrients that promote mold or fungus problems.

#### “Sliding” Feature

The Patented “Sliding” Feature is what makes this product unlike any other in the industry. Each CoolDry Sliding Saddle consists of rigid insulation to cover 360° of pipe. The insulation is fully encapsulated by a premium, zero perm vapor barrier and a self-sealing lap. Adhered to the bottom of the vapor barrier is a heavy gauge saddle. This composite rests on a partial bottom rib Saddle that is topped with a layer of polytetrafluoroethylene (PTFE). The PTFE layer produces saddle to saddle contact with a minimal coefficient of friction ( $\mu$ ). The Buckaroos Saddle features two small ribs on the bottom. These ribs maintain the centered position of the bottom saddle in the hanger as the pipe moves.



The traditional method of insulating at hanger locations with a galvanized insulation saddle and a wood block for support creates a common problem. Eventually, the hanger is supported by the insulation as opposed to the installed support. As a result, the vapor barrier is penetrated and no longer serves its intended purpose. The Sliding Saddle eliminates the potential for this outcome through even weight distribution across the rigid insulation.

The CoolDry Sliding Saddle is the ideal value engineering solution to costly, roller-style hangers, which have a tendency to rust. A combination of Sliding Saddles and clevis hangers is economical and significantly more efficient. Every Insulated Sliding Saddle is labeled with an identifying system sticker for easy recognition on the job site.

#### Application

CoolDry Sliding Saddles are ideal for any dynamic piping system. Systems such as hot water, chilled water, dual-temperature, ammonia refrigeration, low pressure steam, medical gas, etc., demand the Buckaroos CoolDry Sliding Saddles. They are designed for piping system with an operating temperature between -290°F to 250°F. See reverse side for further information on application and design data.

Phone 800-969-3113

[www.cooldrysaddles.com](http://www.cooldrysaddles.com)

Fax 317-899-0775

Replaces 10/2016-rev.01202017

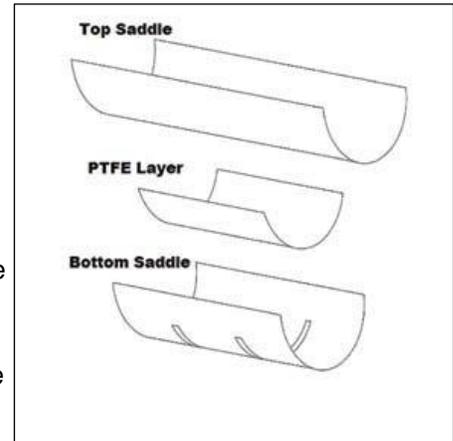


## CoolDry™ Insulated Sliding Saddles

### Application and Design Data

**Allowable Linear Movement** - The CoolDry Sliding Saddle allows for up to 2 inches of linear expansion / contraction in either direction. This saddle is not recommended in place of a manufactured pipe guide. The installation of the product shall be defined by the design engineer based on the specific needs of the system. With the theory that the hanger position will remain stable, the insulation insert and plain saddle must rest on the Ribbed Saddle such that there is room available in the direction that movement is desired. The upper plain saddle shall not move past the end of the lower ribbed saddle at any time. If the product is being used on a static system, the product should be installed with the hanger position centered below both saddles.

Custom sizes are available upon request.



### Technical Data – 25/50 Flame-Smoke Rated Phenolic Foam Pipe Insulation

Physical Property	3.75 PCF	5 PCF	Specification Compliance
<b>Recommended Pipe Sizing</b>	To 10" IPS	11" – 30" IPS	Manufacturer Design Limits
<b>Thermal Conductivity</b> @75°F	.17 Btu·in/hr·ft²·°F	.20 Btu·in/hr·ft²·°F	ASTM C-518
<b>Temperature Limits</b>	-290°F to +250°F		
<b>Compressive Strength</b> Parallel to rise, min Perpendicular to rise, min	50 lb/in² 40 lb/in²	90 lb/in² 70 lb/in²	ASTM D-1621 ASTM D-1621
<b>Water Absorption</b> % by volume	≤ 2,5	≤ 2,5	ASTM D-209
<b>Water Vapor Permeability</b>	≤ 4 perm-inch	≤ 4 perm-inch	ASTM E-96
<b>Specific Heat</b>	.45 Btu/lb.°F		
<b>Closed Cell Content</b>	min. 95%	min. 95%	ASTM D-2856
<b>Flame spread / Smoke developed</b> Up to 4 inches	≤ 25/50	≤ 25/50	ASTM E-84
<b>Saddle, Galvanized Carbon Steel</b> Thickness, range	Hot Dipped G-90 18 gauge - 12 gauge		ASTM A-653 (Replaces A527) ASTM A-653 (Replaces A527)

### Guide Specification

Download our engineer efficient Insulated Sliding Saddles guide specifications located on our [www.buckaroos.com](http://www.buckaroos.com) or [www.cooldrysaddles.com](http://www.cooldrysaddles.com) websites.

Product Dimensions				
Insulation O.D.	Insulation Length	Top Saddle Length	Bottom Saddle Length	Upper and Lower Saddle Gauge
3.5" - 5"	18"	12"	8"	18
6" - 8"	18"	12"	8"	16
9" - 15"	18"	12"	8"	16
16" - 24"	36"	24"	18"	12