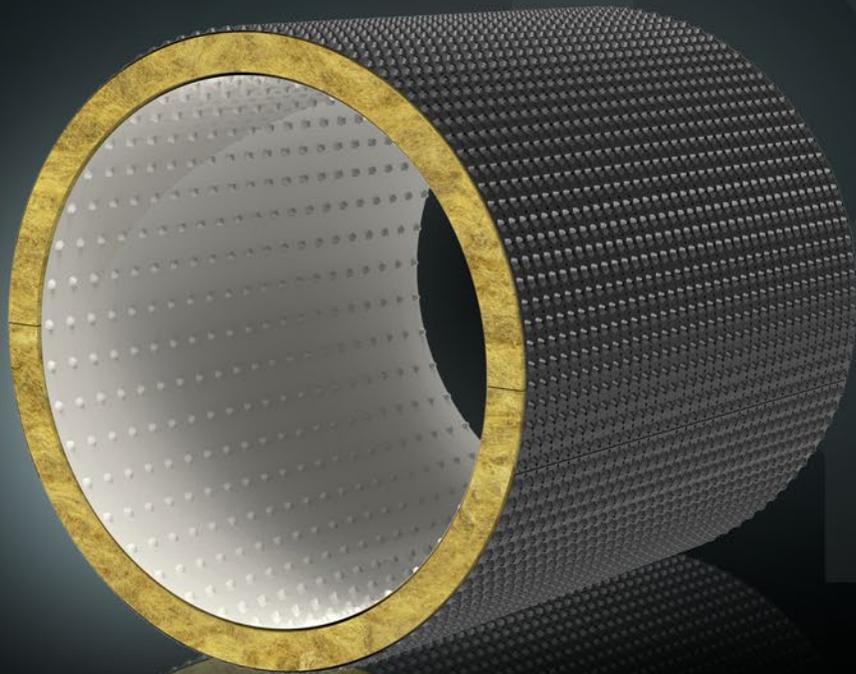




**INTEGRITY**  
PRODUCTS

INTEGRITY-PRODUCTS.COM



INTEGRITY PRODUCTS  
**MULTI-LAYERED SYSTEM  
LAMINATED SERIES**





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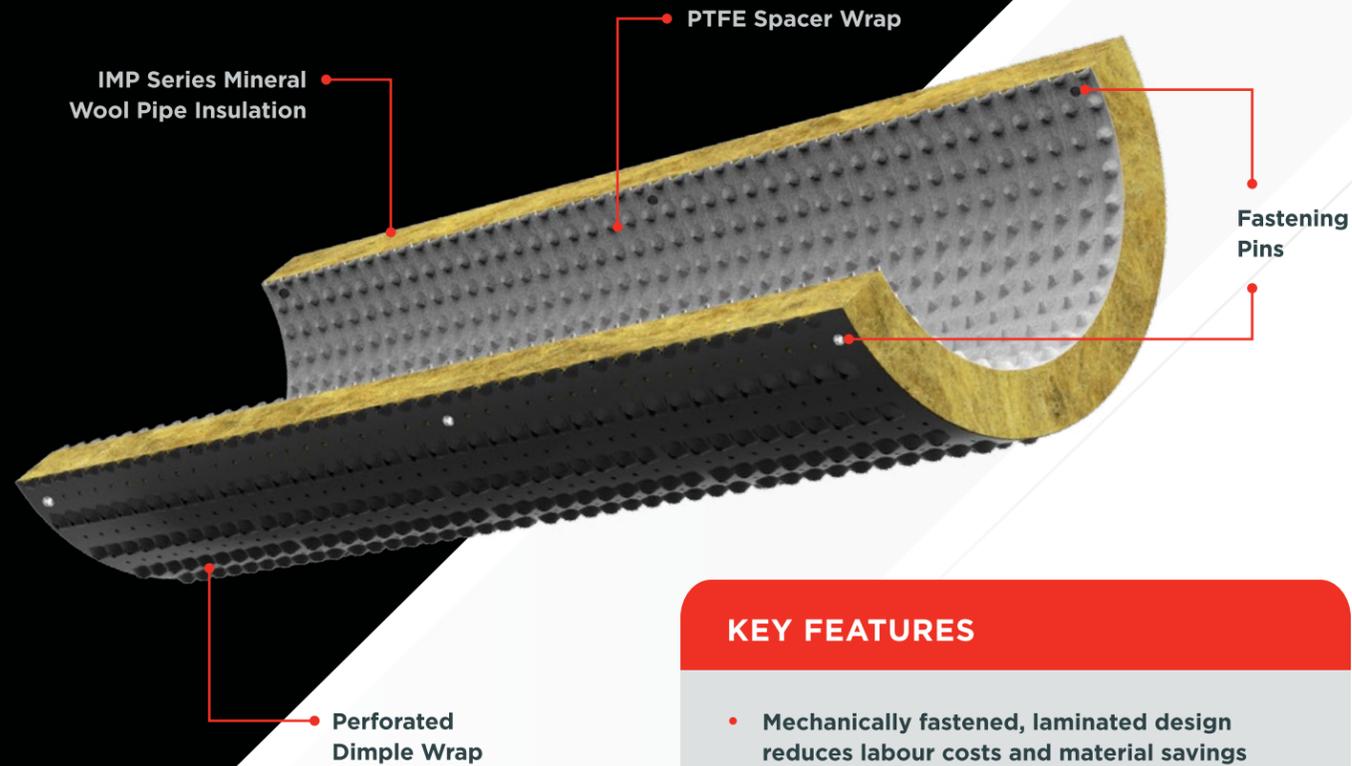
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# ONE STEP INSTALLATION

## LONG-TERM ASSET PROTECTION

The Multi-Layered System is engineered to address Corrosion Under Insulation (CUI) and Stress Corrosion Cracking (SCC), while also providing enhanced heat conservation. The Integrity Products Insulation Ventilation System (IVS) with PTFE Spacer Wrap consists of four key components: Integrity Perforated Dimple Wrap™, Integrity Vents™, Integrity Drains™, and PTFE Spacer Wrap™. The PTFE Spacer Wrap offers exceptional thermal performance, significantly exceeding that of conventional insulation systems. It is engineered to create a 6 mm air gap, serving as a barrier that prevents moisture and leachate from contacting insulated assets. The PVC, Vents, and Drains are specifically designed to facilitate moisture drying in saturated insulation systems, enhancing overall longevity and efficiency.

Building on this proven performance, Integrity Products' Multi-Layered System Laminated Series fundamentally changes how the system is installed. Rather than requiring the sequential installation of the PTFE Spacer Wrap, mineral wool insulation, and Perforated Dimple Wrap as three separate layers in the field, the Laminated Series mechanically fastens these components into a factory-prepared, single-piece pipe cover half-shell. This integrated, bonded assembly significantly reduces installation time, labor effort, and material handling while ensuring a controlled, repeatable fit that resists slippage and maintains long-term system integrity. The system retains the benefits of a non-contact insulation design and active water egress through ventilation and drainage.

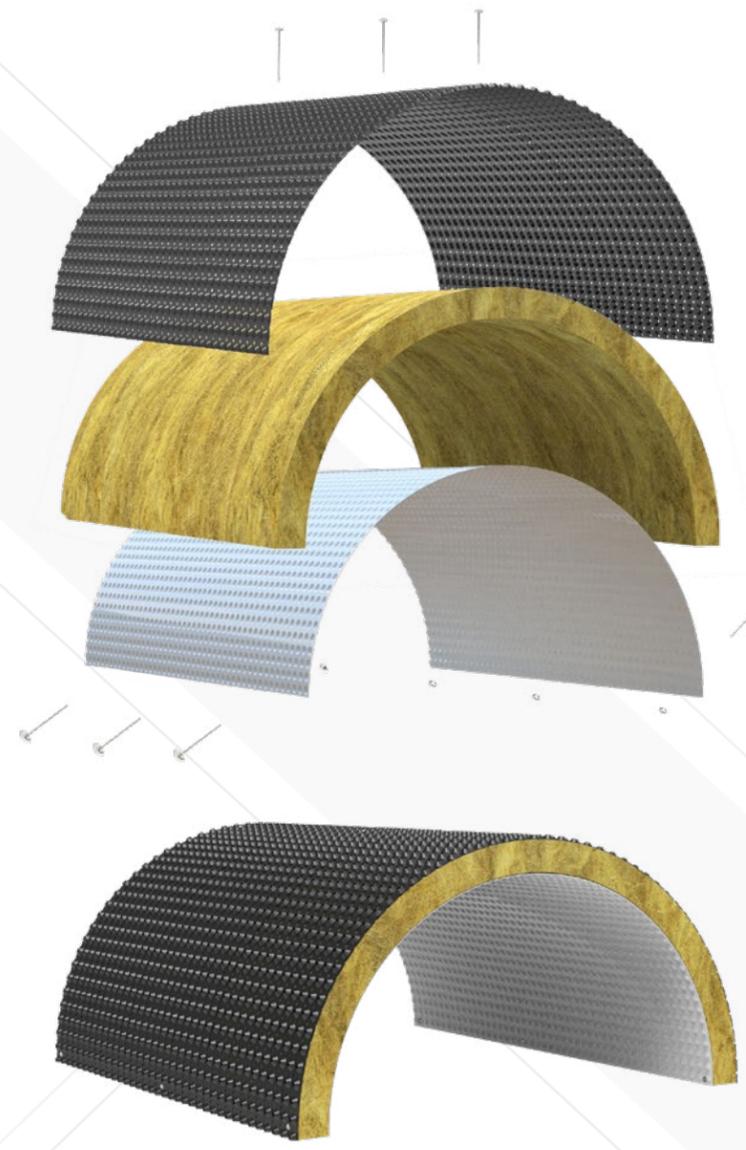


**KEY FEATURES**

- Mechanically fastened, laminated design reduces labour costs and material savings
- Non-contact insulation system creates active ventilation and improved system integrity

## 3 PROVEN COMPONENTS

# ONE INTEGRATED INSTALL READY SOLUTION



### PERFORATED DIMPLE WRAP

- Made from high-quality PVC (polyvinyl chloride) material
- Features perforations and standoffs for in-situ drying of thermal insulation
- Exceptional compressive strength, Perforated with 8 holes per square inch
- Enhances thermal performance by removing moisture and creating a convection air gap
- Compatible with all insulation materials
- Suitable for both new and existing insulation systems

### INTEGRITY IMP INSULATION

- Excellent energy conservation properties that mitigate heat loss, lower operating costs and provide personal protection.
- Good compressive strength
- Low water vapour absorption
- Wide range of service temps with an upper limit of 1200°F continuous.
- Chemically inert
- Light weight
- Easy to handle and assemble
- Cost Effective

### PTFE SPACER WRAP

- Made from virgin PTFE (Polytetrafluoroethylene) material—free from perfluorosulfonic acids (forever chemicals)
- Acts as an impermeable barrier against moisture and leachates
- Extensively verified in field and lab settings for CUI and thermal performance
- 6mm air gap to minimize the risk of localized corrosion and pitting
- Provides a strong thermal barrier, reducing heat transfer in insulated systems
- Offers acoustic benefits
- Compatible with all insulation materials

# SIMPLIFIED INSTALLATION WITH MEASURABLE LABOR SAVINGS

**Reduced Labor and Installation Time**  
with documented savings of 40%+ compared to conventional insulation systems, achieved through an integrated laminated assembly and mechanically fastened construction.

**Mechanically Fastened Laminated Design**  
that ensures controlled fit-up, repeatable installation quality, and a precise, uniform wrap that resists slippage and maintains long-term system integrity.

**Reduced Material Waste**  
the factory-prepared, ready-to-install laminated format minimizes on-site cutting, rework, and disposal of excess insulation and wrap materials.

# ENGINEERED FOR LONG-TERM THERMAL AND CORROSION PERFORMANCE

**Contact Free Insulation System**  
incorporating PTFE Spacer Wrap to maintain a consistent 6 mm stand off air gap, reducing wet contact conditions that drive localized corrosion, pitting, and corrosion under insulation.

**Active ventilation**  
provided by the Perforated Dimple Wrap in combination with Integrity Drains and Vents, enabling vapour migration, gravity drainage, and in situ drying within the insulation system.

**IMP Series mineral wool pipe insulation**  
delivers excellent energy conservation to mitigate heat loss and support lower operating costs, while providing good compressive strength, low water vapour absorption, and a wide service temperature range up to 1200°F continuous; it is chemically inert, lightweight, easy to handle and fabricate, and cost effective.

## 24 INCH PIPE INSTALLATION COMPARISON TRADITIONAL INSTALLATION VS LAMINATED SERIES SYSTEM

TRADITIONAL INSTALL	VS	LAMINATED SERIES INSTALL
<b>Step 1 :</b> PVC Handling		<b>Step 1 :</b> Insulation with PVC + PTFE Incorporated Handling
<b>Step 2 :</b> Insulation Handling		<b>Step 2 :</b> Insulation with PVC + PTFE Fabrication*
<b>Step 3 :</b> PTFE Handling		<b>Step 3 :</b> Insulation with PVC + PTFE Layer + Banding Install
<b>Step 4 :</b> PVC Fabrication		<b>Step 4 :</b> Cladding + Banding Install*
<b>Step 5 :</b> Insulation Fabrication		<b>COMPLETE!</b>
<b>Step 6 :</b> PTFE Fabrication		
<b>Step 7 :</b> PVC + Fastening Install		
<b>Step 8 :</b> Insulation + Banding Install		
<b>Step 9 :</b> PTFE + Fastening Install		
<b>Step 10 :</b> Cladding + Banding Install		

Gores + Sweeps can be cut from the Laminated Insulation. Fastening Material for PVC + PTFE not needed.

**Overall Elimination of 6 Job Steps. Reported ~40% Overall Time Reduction.**

# INTEGRITY IMP SERIES MINERAL WOOL PIPE INSULATION

IMP Series is a mandrel wound mineral fibre insulation made from inorganic fibres, designed for steam and process mechanical piping systems operating at temperatures up to 1200°F (650°C). IMP Series provides superior thermal, acoustical and personal protection. This high quality mineral wool insulation is non-wicking, provides high water repellent characteristics and is non-combustable.

IMP Series has excellent thermal properties. It is wound in 1 meter lengths, split and conveniently hinged as a one piece pipe up to 12" pipe diameter or two piece half sections from 4" pipe diameter up to 30" O.D.

## AVAILABLE FORMS & SIZES

1/2" - 12" split and hinged

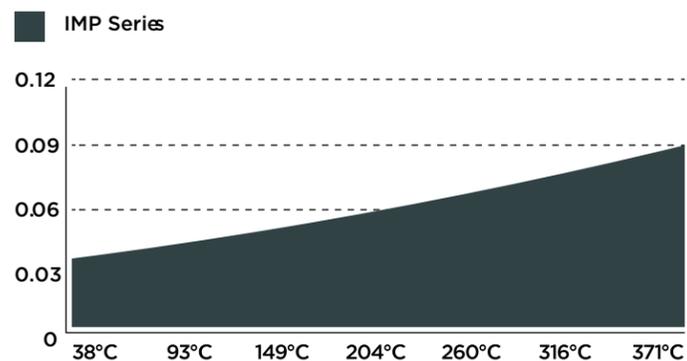
4" - 30" 2 piece half sections

Standard thickness: 1" - 4" in 1/2" increments

Pipe sections are 1 meter in length. Shipped in poly bags for weather protection and easy clean-up.

## THERMAL CONDUCTIVITY // ASTM C335

$\lambda$ (W/mK)



## COMPLIANCE TABLE

Standard Specification for Mineral Fiber Preformed Pipe Insulation	
CERTIFIED	ASTM C547-17
Maximum Temperature Use	
1200°F / 650°C	ASTM C447-15
Sag Resistance, Max Thickness Change	
3.4%	ASTM C411-17
Standard Test Method for Linear Shrinkage of Preformed High-Temperature	
0.08%	ASTM C356-17
Surface Burning Characteristics	
Flame Spread Index = 0 Smoke	ASTM E84-17a
Development Index = 0 Complies	CAN/ULC S102-10
Standard Test Method for Measuring Non-Fibrous Content of Man-Made Rock and Slag Mineral Fiber Insulation	
Passes	ASTM C1335-12 Re-approved 2017
Standard Test Method for Thermal Insulation for Use In Contact with Austenitic Stainless Steel	
Passes	ASTM C795-08 Re-approved 2013
Standard Test Method for Determining the Water Vapour Sorption of unfaced Mineral Fiber Insulation	
0.7%	ASTM C1104/C1104M-13a Re-approved 2017
Standard Test Method for Measuring Non-Fibrous Content of Man-Made Rock and Slag Mineral Fiber Insulation	
Passes	ASTM C1335-12 Re-approved 2017
Water Absorption	
Passes	EN 13472

# INTEGRITY PERFORATED DIMPLE WRAP (PVC)

Integrity's PVC Perforated Dimple Wrap™ is a durable, high-performance PVC barrier engineered to maintain a 6mm air gap between insulation and metal cladding, forming a key component of the Integrity Insulation Ventilation System (IVS) when used with vents and drains. Its perforated, dimpled design enables effective moisture and vapor movement, allowing trapped moisture to migrate into the air gap and exit through the drainage system.

Compatible with all insulation types, pipe sizes, and both hot and cold applications, the wrap is installed with the dimples facing outward to provide mechanical protection and improved drying performance. Adding only 12mm (0.5 in.) to the insulation's outer diameter, it can be used in new installations or retrofits to prevent moisture accumulation and extend the service life of insulation and cladding systems.

## MATERIAL SPECIFICATIONS

MATERIAL(S)	ELONGATION
Polyvinyl Chloride (PVC)	2 ~ 40%
COLOR	SHRINKAGE
Black	1.25%
DENSITY	UV RESISTANCE
1.4 g/cm <sup>3</sup>	Excellent
TENSILE STRENGTH	WORKING TEMP.
35 - 56 MPa	-40°F to 194°F (-40°C to 90°C)
FLAME RESISTANCE	MELTING POINT
Excellent	414°F (212°C)

# INTEGRITY PTFE SPACER WRAP (PTFE)

Integrity's PTFE Spacer Wrap™ is an advanced, highperformance solution that creates a Non-Contact Insulation System to eliminate corrosion under insulation (CUI). Made from chemically inert PTFE, it forms an impermeable barrier against moisture and contaminants, while its dimpled design provides a consistent air gap for enhanced stand-off protection.

Recognized by AMPP and regulatory bodies as a proven corrosion prevention method, it is compatible with all pipe sizes and insulation types. Installed by cleaning, drying, and encapsulating the substrate before insulation, PTFE Spacer Wrap™ delivers uniform protection, extended service life, and long-term durability in demanding environments.

## MATERIAL SPECIFICATIONS

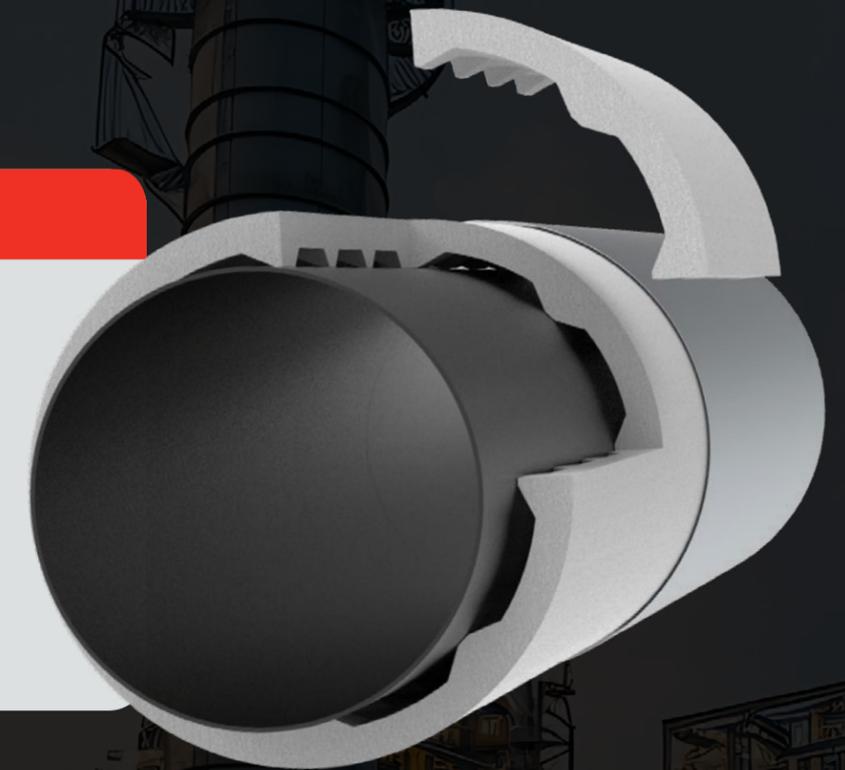
MATERIAL(S)	PTFE (Polytetrafluoroethylene)
COLOR	White
UV RESISTANCE	Excellent
OZONE RESISTANCE	Excellent
TENSILE STRENGTH	255 PSI

ELONGATION	350%
TEMPERATURE RANGE	-200°F to 500°F (-128.9°C to 260°C) <i>Constant Temperature</i>
MELTING POINT	620.6°F (327°C)

# INTEGRITY CF SERIES

## KEY FEATURES

- Contact-Free Design
- CUI Protection
- Full-Volume Hydrophobicity
- High Mechanical Strength
- Inspection Accessibility
- Thermal & Fire Resistance



# INTEGRITY AEROWOOL SERIES

## KEY FEATURES

- Material Performance and Thermal Efficiency Focused on Thermal Loss Reduction
- Installation Efficiency and Cost Optimization





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