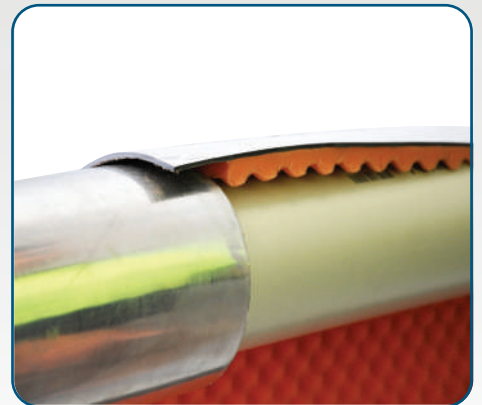
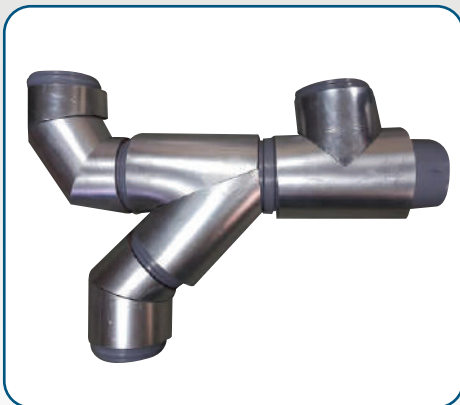
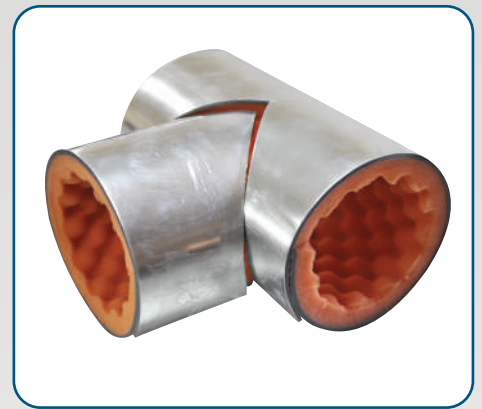
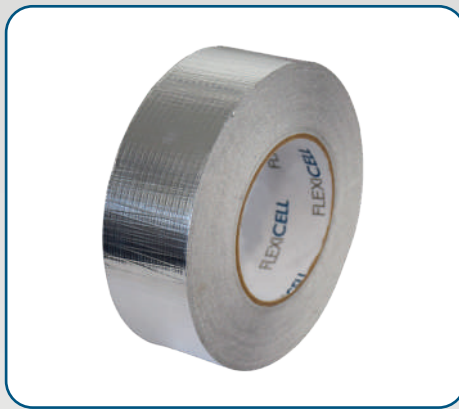
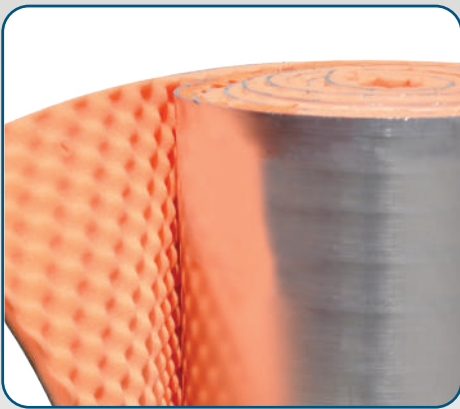


FLEXIWRAP

Installation Guide



Flexible Noise Barrier - FlexiWrap

FlexiWrap is a noise barrier that is both flexible and durable. This acoustic lagging sheet combines noise barrier and noise absorption characteristics in one product. It can be used as a pipe lagging material, garbage chutes acoustic covers, machinery and equipment housing and wall partition to name a few.

Features of the Product

Weight: 4.5 - 5 kg/m², & 8 kg/m² (optional) (±10 %)

Thickness: 20 mm (±3 mm)

Roll dimensions: W: 1350 mm (±20 mm) 2.5 m & 5 m (±50 mm)

Approx. weight per roll: 15.8 - 16.9 kg

VOC: <0.5 mg/m²/hr according to ASTM D5116

Maximum operating temp. with Mass Loaded Vinyl (MLV) surface: +100 °C

Workplace Safety & Health

Under local health, safety standards and safe work practices, the applicator must wear gloves, protective eyewear, and necessary safety equipment.

Description

FlexiWrap is a highly efficient multilayer acoustic lagging composed of a mass-loaded vinyl flexible acoustic barrier with aluminium foil finishing bonded to high sound and vibration absorption layer. FlexiWrap Acoustic Lagging is available in various compositions with barrier weights from 4.5 to 5 kg/m² as a standard and up to 8 kg/m² on request, and is available on convoluted or plain foam.

Technical information about FlexiWrap Acoustic Lagging may be found on page 5.

FlexiWrap Acoustic Lagging is commonly used to cover noisy service pipes, wastewater/drainage pipes, air ducts with high air velocity, valves, compressors and fan housings to decrease breakout noise. Optionally, it can be used in home appliances for the same reason.

The instructions below are intended to serve as a general reference to installing FlexiWrap pipe and duct lagging.

Preparation

- The pipework must be pressure checked, without leakages, and the surface must be clean and dry before installing the product.



- The product should be clean, dry, and devoid of oil, dirt, rips and tears.
- Installation tools/accessories including scissors, knives, gloves, ruler, spatula, templates for fittings and tapes should be secured before starting the installation process.

The Basics of Effective Lagging

- At the joints and edges, there should be no gaps. The recommended practice is to apply overlap on all joints. The performance of the acoustic lagging will be affected even if the tiniest of the gaps are neglected. (For more information, see the section on joint treatment later in this text or refer to FlexiWrap Installation video (www.flexicell.com.au).
- The lagging material must continuously cover the pipe.
- For optimal effectiveness, a good seal around all joints and edges is essential. Use FlexiCell® pressure-sensitive Aluminium Tape or reinforced Aluminium Tape.
- The process of cutting, applying, and fastening the product should be done carefully and with attention to details.

Applications

- Lagging of hydraulic & wastewater pipes
- Duct lagging for air conditioning, ventilation, & exhausts
- Wraps around the compressor, fans & reduction valves
- Wraps for spa motors
- Mechanical rooms & generators
- Garbage disposal chutes
- Wall partitions
- Automotive

Measuring & Cutting Material for Straight Pipe Sections

Before lagging the pipe, determine its length (L) and outer diameter (OD). Using the formula below, calculate and reduce the needed wrapping width (W) of FlexiWrap.

Under the formula:

$$W = \pi \times (OD + (2 \times T)) + OL; \text{ where}$$

OD = outside diameter of the pipe

$$\pi = 3.14$$

T = thickness of FlexiWrap (20 mm)

OL= overlap (40 mm)

T is the overall thickness of acoustic insulation (when utilizing convoluted foam decoupling layers, allow for a 20-50% thickness compression.)

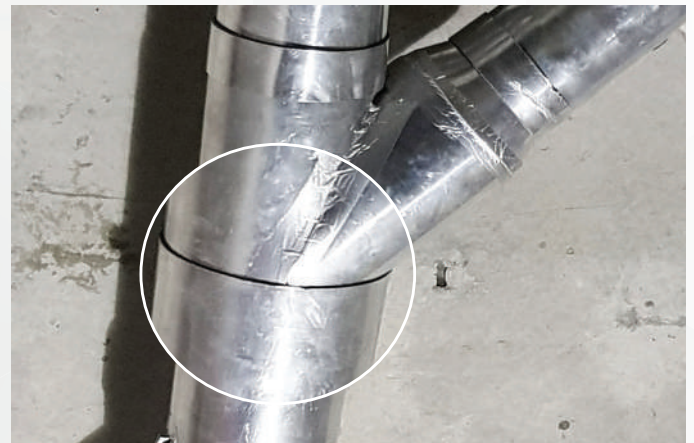
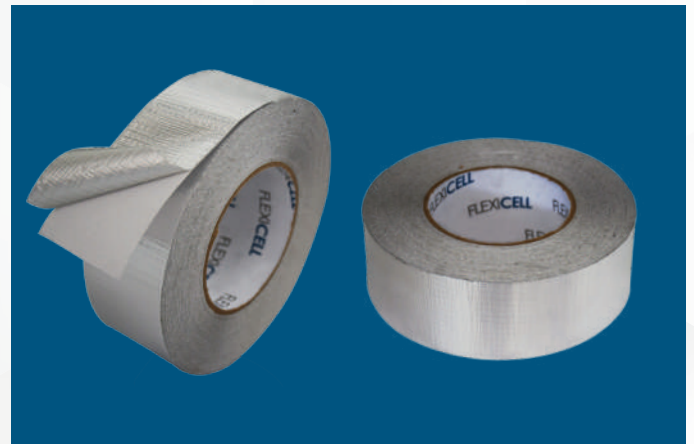
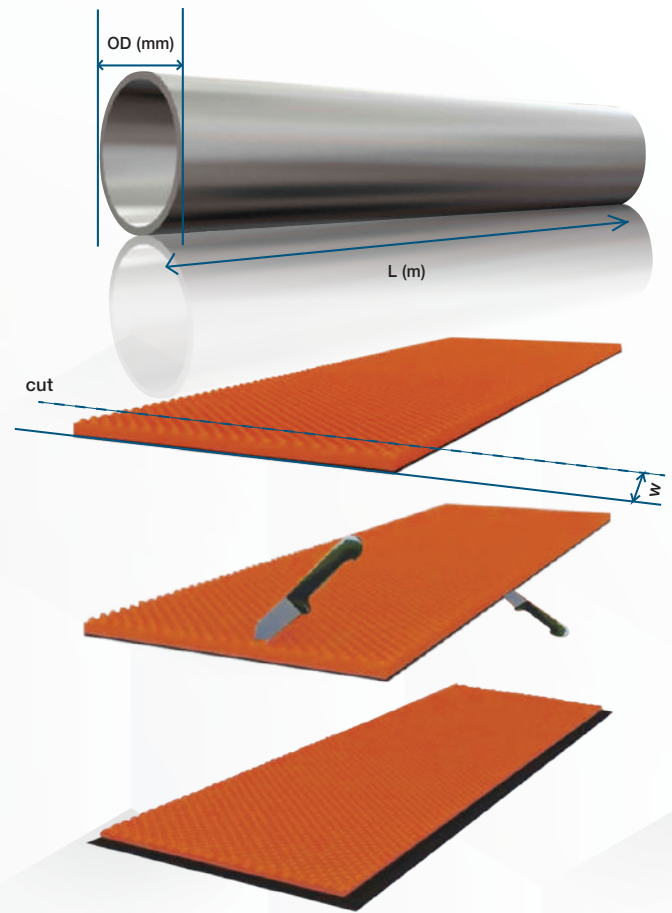
Mark the predicted width (W) along the length of the roll and cut material (as illustrated in the images) with a retractable knife or scissors. FlexiWrap may be trimmed to size with a retractable knife or scissors, resulting in less waste. Always cut the material from the foil-facing barrier on the side.

The following are some facts about FlexiCell® Aluminium Tape:

FlexiCell® can supply an Aluminium Tape upon request. This pressure-sensitive Aluminium Foil Tape is intended as a connecting or covering tape for FlexiWrap's Acoustic Lagging.

Applying an Aluminium Tape (See Illustrations)

- FlexiCell® Tape is simple to rip.
- Remove the backing from the release lining.
- Place the tape in the centre of the pieces to be connected and push firmly across the whole tape surface.
- Smooth down any air bubbles or buckles by wiping or rubbing hard pressure across the tape with a spatula.
- When applying the tape, do not overstretch it, as this may result in buckles and voids in the contact surface.



Joints on straight pipe sections are treated differently.

All junctions along longitudinal pipe sections must have adjacent material segments overlapped.

Overlapping portions must be taped and sealed with FlexiCell® Aluminium Tape.

A strip of 40 mm foam can be removed along one or both edges as needed to accommodate for an overlap at joints. (OVERLAPPING pictures illustrate further information.)

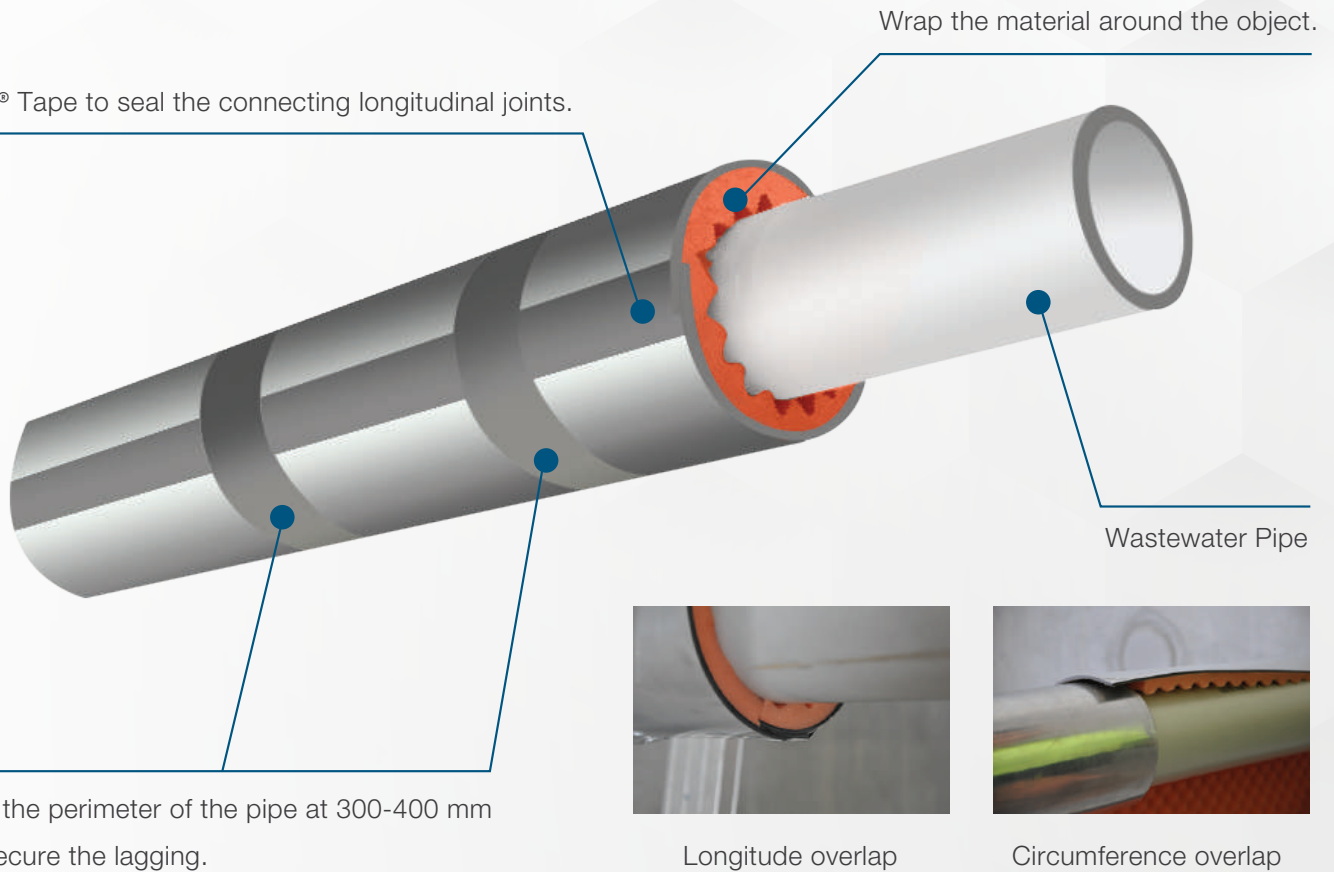
A smooth surface is created by overlapping joints and by removing the foam. To make sure that the overlap is created in a proper way, test the surface by touching it with the metal object. It should not pass through the tape if the joint is adequately sealed.



A Straight Pipe Segment with FlexiWrap Acoustic Lagging

FlexiWrap Acoustic Lagging is applied to a straight pipe segment as shown in a diagram.

Use FlexiCell® Tape to seal the connecting longitudinal joints.



Tape around the perimeter of the pipe at 300-400 mm intervals to secure the lagging.

Disclaimer: This information on Hira Industries products is presented to the best of our knowledge. All product data is based on average values and is for guidance only. As these products are subject to constant research and development, we reserve the right to update the contents without notice.



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