



## Material

IntelliWrap™ LTVP is a weather resistant barrier coating designed to coat and seal the exterior surface of the sheathing. Using proprietary technology, IntelliWrap LTVP protects the sheathing material from the elements prior to the installation of the exterior cladding while permitting the transmission of excess water vapor from within the wall cavity. IntelliWrap LTVP provides an energy efficient, fully adhered alternative to traditional house wrap. It is the essential component in the Air Guard Weather Resistant Barrier System and is compliant with ICC ES AC 212 requirements.

IntelliWrap LTVP is suitable for use over plywood, oriented strand board and impregnated fiberboard (blackboard) sheathing. It can be used behind a wide range of cladding systems, including siding, stucco, stone and brick.

The IntelliWrap LTVP system includes:

- IntelliWrap LTVP Membrane
- IntelliWrap LTVP Joint Sealant
- IntelliWrap LTVP Joint Fabric
- IntelliWrap LTVP Counter Flashing

## Properties

### Protects the Sheathing From Liquid Moisture & Moisture Vapor

IntelliWrap LTVP is completely and uniformly adhered to the sheathing unlike house wrap. It prevents liquid moisture from penetrating the sheathing and provides an avenue of escape for moisture trapped within the interior wall cavity. Liquid moisture will not penetrate or flow between IntelliWrap and the sheathing. In a traditional house wrap application, numerous mechanical fasteners are used to keep the wrap in place and to seal rips and tears in the wrap caused by other trades on the job site. The IntelliWrap LTVP system does not require the use of mechanical fasteners.

### Reduces Air Leakage & Home Energy Usage

A fully-adhered IntelliWrap LTVP System requires that all seams and window and door openings be completely sealed. Consequently, air leakage is significantly reduced and energy loss is moderated. The U.S. Department of Energy estimates that 40% of a building's energy loss is due to air infiltration. The IntelliWrap LTVP system attacks and minimizes air leakage at its source and contributes to a reduction in air exchanges per hour (ACH) by a factor of 2.

### Improves Home Energy Rating Index (HERS Rating)

The HERS Rating index was developed by the Residential Energy Services Network (RESNET). It effectively estimates home energy use and is routinely consulted by builders who are interested in constructing more energy efficient structures. The HERS index provides measures for the location and thickness of insulation, HVAC capabilities and air sealing techniques. A lower HERS rating is indicative of a more energy efficient structure. Reducing uncontrolled air leakage through seam, window and door openings will conserve energy and improve the HERS rating. It is a win-win for builders who construct ENERGY STAR® homes and/or who seek tax credits for energy efficient construction.

### A Better Way to Build a Home

The IntelliWrap LTVP System provides an effective alternative to and serves as an upgrade over traditional house wrap. It protects and seals the sheathing, permits moisture vapor to migrate from the interior wall cavity and dramatically reduces air infiltration and leakage. It contributes to a lower HERS rating and enables the builder to meet and exceed ENERGY STAR requirements while also improving the likelihood of qualifying for energy tax credits.

## Surface Preparation

Prior to the application of the IntelliWrap LTVP system, the applicator should confirm that the substrate is referenced in the system specifications and approved by the local code authority. The sheathing must be structurally sound, intact, securely fastened and free of loose material, voids, projections or other conditions that may interfere with the application of the IntelliWrap LTVP system.

The applicator should confirm that all rough openings are in place and properly sloped. The substrate must be sufficiently dry; there should be no visible water in any of the joints and the substrate should not be wet to the touch. Sheathing moisture content should not exceed 24% (measured with a moisture meter). The builder must be notified of any deficiencies; do not proceed with the application unless and until they are corrected.

The substrate should also be free of foreign materials such as oil, dust, dirt, paint, wax, water repellents, liquid water, frost, snow, ice and any other materials which could adversely impact adhesion. Dirt and mud can be removed with a scraper or brush. Some materials may require the use of soap and water to ensure that the substrate is properly cleaned. If soap and water are used, allow the substrate to dry before the application of the IntelliWrap LTVP system.



*IntelliWrap™ LTVP is a component of the IntelliScreen™ Complete Rainscreen System from IMETCO®. Contact your IMETCO representative for more information.*





## Application

IntelliWrap LTVP membrane and joint sealant do not require the use of primers. If IntelliWrap LTVP joint sealant is not used, all joints should be sealed with IntelliWrap LTVP membrane and joint fabric. IntelliWrap LTVP membrane should be applied over and on each side of the joint to be sealed at a thickness of 20 wet mils. IntelliWrap LTVP joint fabric is then embedded into the base coat of IntelliWrap LTVP membrane. Ensure that the joint fabric is firmly embedded into the base coat. Standard construction staples may be required to ensure that the joint fabric is firmly embedded into the membrane. The IntelliWrap LTVP joint fabric is then top coated with IntelliWrap LTVP membrane applied at a rate of 20 wet mils. Brush or roll the top coat to ensure that the joint fabric is completely coated and fully adhered to the exterior surface of the sheathing. Do not apply more IntelliWrap LTVP joint fabric than can be completely coated and fully adhered in a day or before any precipitation.

IntelliWrap LTVP membrane and joint sealant are ready for application as is. In cooler weather, it may be necessary to heat IntelliWrap LTVP membrane for ease of application. Do not heat the material above 130 deg. F. IntelliWrap LTVP membrane should not be installed during rain or if rain is imminent. The vertical and horizontal sheathing joints should be treated as outlined in the preceding paragraph. The sheathing should be fully and evenly coated with IntelliWrap LTVP membrane applied at a minimum thickness of 20 wet mils (approximately 80 sq. ft. per gallon). IntelliWrap LTVP membrane can be brush, roller or spray applied. The actual coverage rate may vary on individual installations due to the porosity of the surface, sheathing condition etc.

If IntelliWrap LTVP joint sealant is used in lieu of IntelliWrap LTVP membrane and IntelliWrap LTVP joint fabric to treat the joints, a general rule of thumb is that sealant usage is roughly 25 – 40% of the volume of IntelliWrap LTVP membrane used on the job. IntelliWrap LTVP membrane and joint sealant require 2 to 4 hours cure time at 70 deg. F, 50% relative humidity. Cool, damp conditions will retard cure time; hot, dry conditions will accelerate cure time. IntelliWrap LTVP membrane and joint sealant are subject to wash off if they are not sufficiently cured prior to the advent of inclement weather conditions. The IntelliWrap LTVP system should not be left exposed more than 120 days prior to being covered with exterior cladding.

Technical Specifications (All results meet/exceed the standard)	
Tensile Bond	ASTM C 297
Tensile Bond (Joint Treatment)	ASTM C 297
Tensile Bond (Flashing)	ASTM C 297
Freeze / Thaw	AC 212
Water Resistance	ASTM D 2247
Water Vapor Transmission	ASTM E 96, B
Water Penetration	ASTM E 331
Transverse Load	ASTM E 1233
Racking (Post Transverse Load)	ASTM E 72
Restrained Environment Cycling (Post Transverse Load)	AC 212
Water Penetration (Post Transverse Load)	ASTM E 331
Weathering	AC 212
Post Weathering Hydrostatic	ASTCC 127
Packaging	5 Gallon 55 Gallon
Coverage Rate	80 sqft / gallon

Note: The IntelliWrap LTVP system is not designed to seal penetrations through the sheathing exterior such as window and door openings, utilities, electrical fixtures, vents etc. Sealing of penetrations is a separate action item which should be agreed upon by the installation contractor and the builder before the application of the IntelliWrap LTVP system. The builder, at his discretion, may opt to have another trade install the flashing and counter flashing around the various penetrations through the sheathing. In all cases, IMETCO recommends adherence to good construction practices in regard to installing flashing and counter flashing details.

## Storage & Handling

IntelliWrap LTVP Membrane and IntelliWrap LTVP Joint Sealant are water-based materials. They must be kept from freezing. Both materials should be stored off the floor at temperatures above 50 deg. F. Opened drums should be tightly sealed prior to storage to minimize film development on the top of the liquid.

Shipping water-based material during cold weather months can be problematic because the material can freeze during shipment. In cold weather months, the bill of lading will contain a Keep From Freezing notification and freeze tabs will be placed on the material containers. If the freeze tab is broken upon delivery, mark the bill of lading accordingly and notify IMETCO immediately. Maximum storage temperature should not exceed 100 deg. F, and the containers should not be exposed to direct sunlight. Typically, it is not necessary to mix IntelliWrap LTVP membrane prior to use. If the applicator elects to mix IntelliWrap LTVP, do so in a manner which will not introduce and entrain air into the coating. Avoid the use of paddle mixers and other mechanical means of mixing material.