

**Pecora XL-Perm (STPU) Hybrid Based Air, Vapor, and Water Resistive Barrier Coating Application Guidelines at Various Temperatures**

The Pecora XL-Perm (STPU) hybrid based fluid applied coatings (XL-Perm<sup>ULTRA</sup> VP and XL-Perm<sup>ULTRA</sup> NP) may be successfully applied at various ambient temperatures ranging from 0°F to 100°F. The guidelines published here address roller and spray applications including applying the coating at low temperatures. Applying the XL-Perm coatings will require the following steps prior to the roller or spray application:

- Ensure all surrounding areas are protected from damage during installation of the Pecora XL-Perm coatings.
- Complete all change of plane, seams, static joints and flashing with Pecora XL-Flash Liquid Flashing and Joint Filler before applying Pecora XL-Perm coatings. When used as a flashing, apply XL-Flash at 20 - 40 wet mils.
  - *Dynamic (moving) joints must be sealed with the Pecora 890NST Silicone Sealant or approved equivalent.*
- For transitions between building components with significant movement use Pecora XL-SPAN transition system.

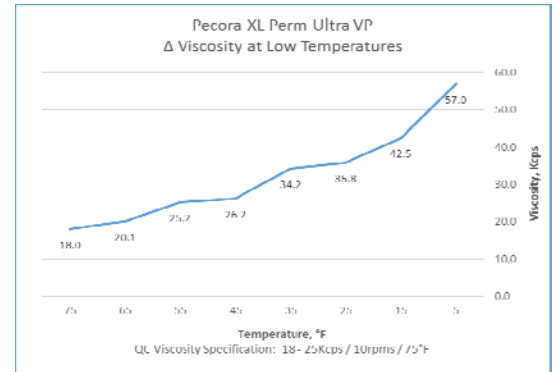
**XL-Perm Coating General Installation Guidelines:**

- Pecora XL-Perm coatings may be applied with a roller or approved airless sprayer (refer to Technical Bulletins #210 & 211 for equipment requirements and standard operating procedures).
  - Spray apply to exterior wall in a single coat through approved airless spray equipment.
  - Roller apply to exterior wall assembly using vertical strokes with slight diagonal slant.
  - Recommended nap size:
    - Rough surfaces such as CMU = 1/2" to 5/8" (depending on porosity)
    - Smooth surfaces such as exterior sheathing = 1/2"
  - Apply coatings at recommended wet mil thickness.
- Inspect for pinholes, voids or gaps in the membrane and repair as needed.
- Allow product to cure; these times will vary depending on temperature, substrate and humidity. At 70°F and 50% humidity Pecora XL-Perm coatings should be dry to touch in one (1) hour.

**Low Temperature Applications**

The Pecora XL-Perm air, vapor and water resistive, fluid applied coatings utilizes a solvent based, hybrid (STPU) formulation which allows the coating to be successfully applied at a variety of temperatures including below freezing (32°F / 0°C). The following will apply to low temperature applications:

- **Areas to receive coating must be clean, dry and free of frost or any contaminating substances.**
- **Material temperature should be 65°F or greater.** Store coatings in a temperature controlled area, if possible.
- **Pecora XL-Perm coatings may be roller applied at ambient temperatures down to 5°F (-18°C).** The adjacent graph illustrates the change in product viscosity as temperature decreases.
- **Pecora XL-Perm coatings may also be spray applied** at low temperatures provided the material conditioning and equipment requirements published on page two are followed.
- **Low temperatures & relative humidity will reduce the cure rate of moisture cure, fluid applied coatings.** The Pecora XL-Perm hybrid (STPU) formulations are less sensitive to low temperature / relative humidity than competitive chemistries and will continue to cure at these conditions. See table below for skin times and cure rates at low temperature / relative humidity:



Cure Conditions	Skin Time (Elastomer Formation), Time		Full Cure, Time		Coating Thickness, wet mils	
	XL-Perm <sup>ULTRA</sup> VP	XL-Perm <sup>ULTRA</sup> NP	XL-Perm <sup>ULTRA</sup> VP	XL-Perm <sup>ULTRA</sup> NP	XL-Perm <sup>ULTRA</sup> VP	XL-Perm <sup>ULTRA</sup> NP
<b>75°F / 50%RH</b>	<b>15 - 20 min</b>	<b>20 - 30 min</b>	<b>45 - 60 min</b>	<b>60 min</b>	<b>10 - 14</b>	<b>17 - 20</b>
<b>10°F / 30%RH</b>	<b>3 - 4 hrs</b>	<b>24 hrs</b>	<b>36 - 48 hrs</b>	<b>48 - 72 hrs</b>	<b>10 - 14</b>	<b>17 - 20</b>