



August 13, 2008

Prepared for: Fi-Foil Company, Inc.
Auburndale, Florida
Product Application: Flash & Foil™

**Recommendations Concerning the Use of VR Plus Shield with
Spray-Applied Polyurethane to Insulate Wall Cavities**

The following statement regarding water vapor transmission in walls containing VR Plus Shield reflective insulation and spray-applied polyurethane foam has been prepared.

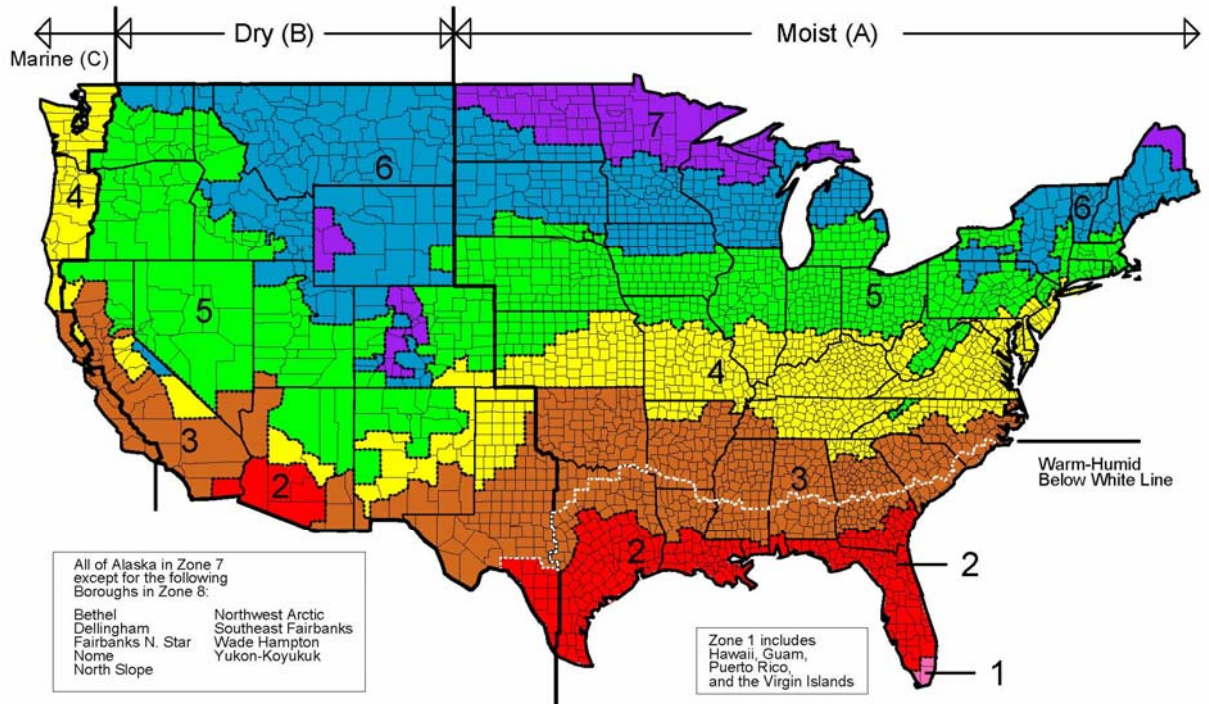
- (1) Building codes must be followed in all cases.
- (2) If a local building code does not specify a water vapor retarder requirement, then the following recommendation should be followed.
- (3) Climate Zones are shown on the map that follows the recommendations.
 - a. **Climate Zones 1, 2, and 3**
The perforated or Hi-Perm Version of VR Plus Shield should be used on the interior side of the wall cavity in Climate Zones 1, 2, and 3. The perforated Hi-Perm Version of VR Plus Shield has a perm of 5.42 when measured in accordance with ASTM Test Method E-96.
 - b. **Climate Zones 4 and Above**
The non-perforated or Standard Version of VR Plus Shield should be used on the interior side of the wall cavity in the northern climate zones to provide a water vapor retarder. The Standard non-perforated Version of VR Plus Shield has a perm of 0.20 when measured in accordance with the appropriate ASTM Test Method E-96.
 - c. In all cases, a thickness of at least one inch of spray-applied polyurethane should be applied on the inside surface of the exterior side of the cavity.

Sincerely,

A handwritten signature in black ink that reads 'David W. Yarbrough'.

David W. Yarbrough, PhD, PE
R&D Services, Inc.

Climate Zones in United States of America



March 24, 2003